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JULY 21ST-27TH 2018

Humiliation in Helsinki

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The plan to save the

WWT



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On the cover

The global trading system is in grave danger, but there is still a chance of a rescue: leader, page 9. The peace plan, page 16. Amid tensions with America, China is reassessing its ties with Europe, page 31. The idea of Eurasia is once again in fashion: **Banyan**, page 30

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5 The world this week

Leaders

- 9 **World trade**
A plan to save the WTO
- 10 **Donald Trump in Europe**
Humiliation in Helsinki
- 10 **Britain and the EU**
A second referendum
- 11 **Europe v Google**
High fines, meagre results
- 12 **Pakistan's election**
Foul play

Letters

- 15 **On populism, Brexiteers, technology, political language, data sampling, solar energy, meetings**

Briefing

- 16 **The world trading system**
Trade blockage

United States

- 19 **Unions**
Beginnings and endings
- 20 **Election interference**
GRU II
- 21 **Male voters**
Sometimes it's hard
- 22 **The Midwest**
Nice change
- 23 **Lexington**
A legitimacy problem

The Americas

- 24 **Unrest in Haiti**
A gamble gone wrong
- 25 **Law and politics in Brazil**
Lula, livre?
- 25 **Paraguay and Taiwan**
The blossom and the passion flower
- 26 **Bello**
Mexico's misshapen economy

Asia

- 27 **Pakistan's election**
Military machinations
- 28 **The Cook Islands**
When economic success stings
- 29 **LGBT rights in Singapore**
Cautious progress
- 30 **Banyan**
The return of Eurasia

China

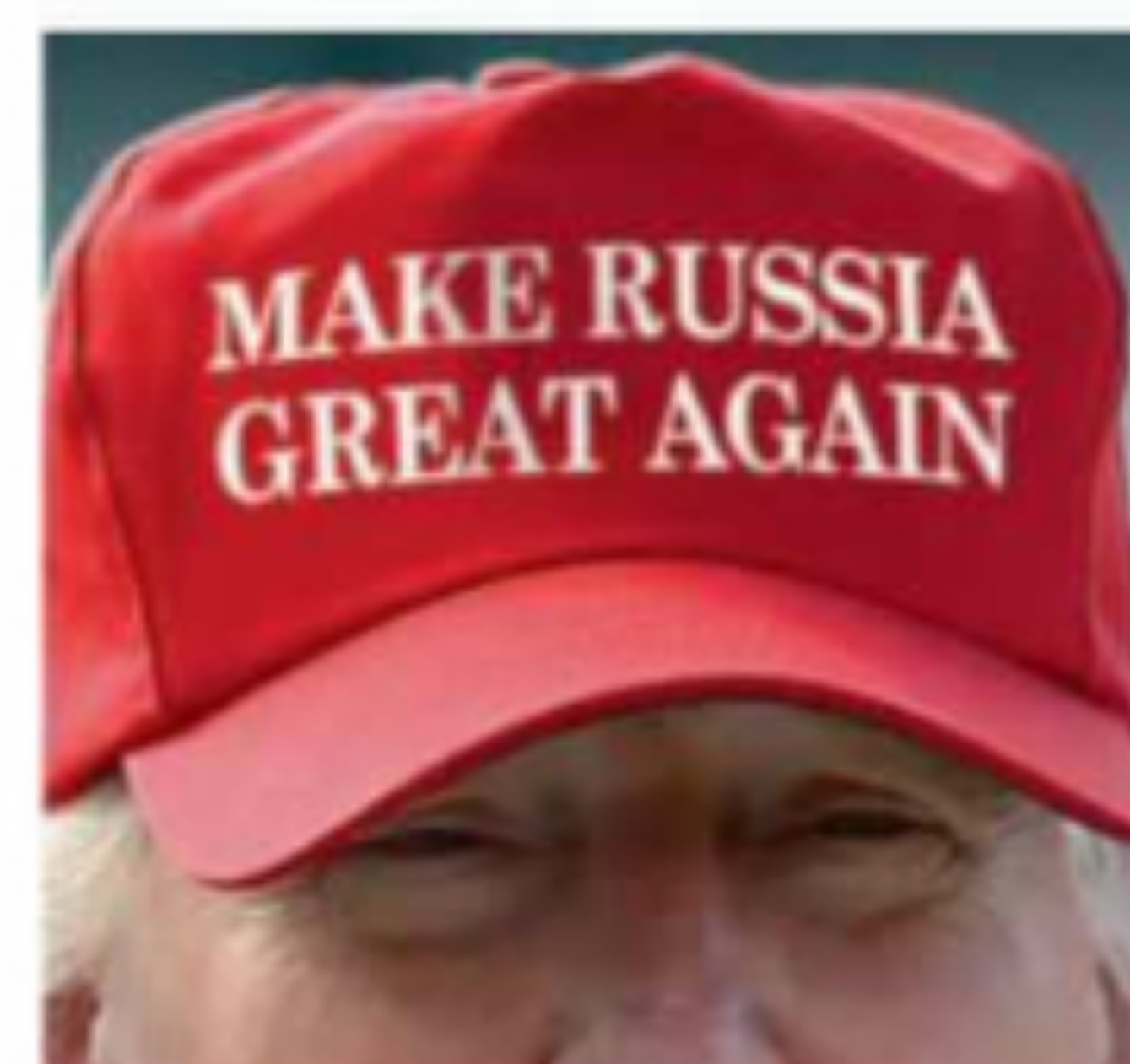
- 31 **Diplomacy**
China turns to the EU
- 32 **A hit and a flop**
A notable month for cinema

Middle East and Africa

- 33 **Red Sea scramble**
Ports in the Horn
- 34 **Djibouti in deep water**
The risk of Chinese cash
- 34 **Turkey in Syria**
You break it, you own it
- 35 **Morocco's new friends**
Handshakes in Africa
- 35 **Infertility in Nigeria**
A bad place to be barren
- 36 **Slavery in Mauritania**
Still with us

Europe

- 37 **The Trump-Putin summit**
In the Hall of Mirrors
- 38 **Corruption in eastern Europe**
Miss justice
- 38 **Xenophobia**
Stranger swings
- 39 **Turkey's ultra-nationalists**
Dancing with wolves
- 39 **Spanish history**
Disturbing Franco's ghost
- 40 **An interview with Bruno Le Maire**
The adaptable Gaullist
- 41 **Charlemagne**
The backlash against Airbnb



Helsinki How to interpret Donald Trump's humiliating press conference with Vladimir Putin: leader, page 10. Two depressingly similar presidents meet, page 37. Mr Trump's defensiveness about the effect of Russian hacking is revealing: **Lexington**, page 23



Brexit If Parliament cannot agree on a plan, the decision must go back to the people: leader, page 10. The mechanics of a second referendum, page 43



Pakistan Time for the generals to aim for clean elections: leader, page 12. Abuses and violence overshadow a vote that could hand power to Imran Khan, a former cricket star, page 27



Google Despite a global techlash and high fines in Europe, America's online giants do not have much to fear from regulators, page 47. The European Commission is right to tackle the tech titans, but its remedies are wanting: leader, page 11



European Central Bank Mario Draghi's replacement will be chosen after much political haggling, page 53



Venezuela How its astute citizens preserve their savings from hyperinflation—and the lessons for everyone else: Buttonwood, page 54

Britain

- 43 **A second Brexit referendum**
Here we go again?
- 44 **The radical right**
Back from a brief 'kip

International

- 45 **The sexualisation of children**
Grappling with the "Lolita complex"

Business

- 47 **Taming tech titans**
Antitrust theatre
- 48 **Bartleby**
Work till you drop
- 49 **Nord Stream 2**
Putin that in your pipe
- 49 **Netflix**
Don't look now
- 50 **Vanadium**
Beauty and long life
- 51 **Higher education**
Learning difficulties
- 52 **Schumpeter**
Companies and time

Finance and economics

- 53 **European Central Bank**
Succession planning
- 54 **Buttonwood**
A trunkful of bolívares
- 55 **Goldman Sachs**
White smoke over West Street
- 55 **Football transfers**
Goal poachers
- 56 **China's economy**
Jostling eunuchs
- 57 **Income-share agreements**
Higher returns
- 58 **Free exchange**
The ballot or the wallet

Science and technology

- 63 **Computer programming**
And now for something completely different
- 64 **Medicine**
Cutting to the truth
- 65 **Archaeology**
Toast before tillage
- 65 **Virology**
Second-mover advantage
- 66 **Flying cars**
A James Bond special

Books and arts

- 67 **The Flint water scandal**
River of fire
- 68 **Murder at Harvard**
Where it happened
- 68 **Mughal history**
Not just a pretty face
- 69 **Muriel Spark at 100**
In her prime
- 70 **Johnson**
Fossil hunting
- 72 **Economic and financial indicators**
Statistics on 42 economies, plus a closer look at Turkey

Obituary

- 74 **Lord Carrington**
A question of honour



Python A simple and versatile computing language has brought coding to a vast new audience, page 63

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Politics



President Donald Trump of **America** and President Vladimir Putin of **Russia** met in Helsinki, the capital of Finland, for their first-ever summit. The bulk of the meeting was conducted without officials present, leading to much confusion. In their press conference, the two men praised each other and appeared to be in broad agreement. Mr Trump even exonerated Mr Putin of interfering in America's election, in defiance of his own country's intelligence assessments. However, in subsequent days, he appeared to change his mind.

America's Department of Justice charged 12 Russian intelligence officers with hacking Democratic officials in the presidential election of 2016. The indictment was the first by American officials to directly charge Russia's government with meddling in the poll.

In an unrelated case, a Russian woman, Maria Butina, appeared before a court in Washington, DC, accused of trying to influence American politics as a spy for **Russia**. She allegedly courted Republican-supporting lobby groups, such as the National Rifle Association, under the direction of a senior Russian official.

Look down

Pakistan's former prime minister, Nawaz Sharif, returned to his country to begin serving a ten-year prison sentence. Last year he had been disqualified from holding office by the country's Supreme Court in a graft case. His arrival added to tensions ahead of a forth-

coming election. On the same day a suicide-bomber killed over 140 people at a political rally in the south-western province of Balochistan.

At a summit with the EU, **China's** prime minister, Li Keqiang, spoke in conciliatory tones about his country's trade war with America. China has been rallying support from foreign powers in the face of new American tariffs. But Mr Li said China did not want any country, let alone America, excluded from a reformed multilateral trading system.

The Hong Kong National Party, which supports independence for the city from mainland China, faces possible closure under the Societies Ordinance, a colonial-era law which has never before been used to ban such a group. Becoming a member of the party, acting on its behalf or raising funds for the organisation would become illegal. Officials in **Hong Kong** have said the party should be banned "in the interests of national security".

I dreamed a dream



France beat Croatia 4-2 in a football match in Moscow to win the World Cup. The country last won the accolade in 1998, when the tournament was held in Paris. Football fans partied on the streets in cities across France. In Paris the celebrations were marred by two deaths and violence that left shop windows smashed.

In a mixed week for Theresa May, **Britain's** prime minister, Parliament narrowly rejected an amendment to trade legislation that could have forced the country to stay in the EU's customs union. If it had

passed, it would have plunged her Brexit strategy into chaos and could have caused the collapse of her government. Earlier in the week she had caved into demands by a group of hard-Brexit supporting MPs that appeared to contradict her own government's policy on leaving the EU.

Master of the house

John Magufuli, the president of **Tanzania**, said that his ruling party will be "in power forever, for eternity". Under Mr Magufuli, the country has become increasingly autocratic. He has ordered that pregnant girls be expelled from schools and recently called for prisoners to be kicked and made to work "day and night" if they are deemed to be lazy.

The number of migrants crossing through **Niger** to reach Europe fell by 95% in 2017, said Antonio Tajani, the president of the European Parliament. Niger had been one of the main transit routes across the Sahara, used by as many as 330,000 people in 2016 to reach Libya and then cross the Mediterranean Sea to Europe.

A video emerged purporting to show soldiers from **Cameroon** killing unarmed women and children accused of being members of Boko Haram, a jihadist group.

Iran petitioned the International Court of Justice over the "unlawful reimposition of unilateral sanctions" by America following its withdrawal from the Iran nuclear deal earlier this year.



Thousands of **Iraqis** took to the streets over the country's poor services and infrastructure. At least eight people have

been killed, scores wounded and some government buildings were burned. The riots come more than two months after a disputed parliamentary election. Authorities are still recounting ballots.

Israel carried out its biggest round of air strikes in Gaza since 2014. Binyamin Netanyahu's government is under pressure to stop the near-daily waves of flaming kites that have burned thousands of acres in southern Israel. Egypt is trying to broker a truce.

Separately **Israel's** parliament, the Knesset, passed a controversial bill declaring the country to be the nation state of the Jewish people. The bill removes Arabic as an official language and is seen as discriminatory against Israeli-Arabs, who make up around a fifth of the population.

Do you hear the people sing

Police and paramilitaries in **Nicaragua** killed ten protesters after a countrywide general strike. The protesters want President Daniel Ortega, a former guerrilla leader, to agree to early elections. Human-rights groups say 300 people have died in the protests thus far.

Andrés Manuel López Obrador, a charismatic populist who was elected **Mexico's** president earlier this month, is considering the decriminalisation of drugs. Mexico's war on drugs is estimated to have cost the lives of around 150,000 people since it began in 2006.

The United States is suing **Canada** and several other countries at the World Trade Organisation for retaliating against Mr Trump's tariffs on steel and aluminium.

Police in **Brazil** are searching for a celebrity plastic surgeon who has gone on the run after a woman to whom he gave buttocks-enlarging injections died. Dr Denis Furtado, nicknamed "Dr Bumbum", has appeared frequently on Brazilian television and has 650,000 followers on Instagram. ►►



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Business

The **IMF** warned that the tariffs on imports threatened by both President Donald Trump and his trading partners could lower the annual growth rate of the global economy by 0.5 percentage points by 2020. The fund left its forecasts for global economic growth in 2018 unchanged.

Jerome Powell, the chairman of the **Federal Reserve**, testified to lawmakers about the health of the American economy. Solid growth and stable inflation should, he said, allow the Fed to raise interest rates gradually. His comments helped the **dollar** reach a three-week high against a basket of other currencies.

The **European Union** and **Japan** signed the world's largest bilateral trade pact. The Economic Partnership Agreement is the result of five years of negotiation. The Japanese will gradually lower their tariffs on European wine, meat and cheese, and the EU will drive down levies on imports of cars and vehicle parts from Japan.

Plane despair

Bosses from **Rolls-Royce**, an aircraft-engine maker, and **Airbus**, a plane manufacturer, again voiced their frustration at disarray in the British government over plans for leaving the EU. Rolls-Royce warned that a hard Brexit would hit competitiveness. Airbus said its contingency plans for a disorderly exit were well-advanced.

The EU's competition commission fined **Google** €4.3bn (\$5bn) for abusing the dominance of its Android operating system for smartphones. That is the largest antitrust penalty ever imposed by the regulator. The authorities concluded that the tech firm forced device-makers to pre-install its apps and services, and allowed Google 90 days to end its "illegal conduct". The company said it would appeal against the decision.

Goldman Sachs, an investment bank, confirmed that its longtime chief executive, Lloyd Blankfein, will step down in September. David Solomon, the bank's co-chief operating officer, will take his place. The bank also reported a 40% rise in its second-quarter profits.

All sewn up

Deutsche Bank, Germany's biggest lender, surprised investors with a forecast-busting earnings preview. It expects to report a profit of around €400m (\$477m) in the second quarter, more than double analysts' projections. The news was so good that the bank made its announcement nine days ahead of schedule. It is an encouraging start for Christian Sewing, its fourth chief executive in as many years, and ends a run of bad earnings figures. The bank's shares rose by 7%.

Amazon claimed that **Prime Day**, its 36-hour period of discounts, was the biggest shopping event in its history. Members of the company's subscription service bought over 100m products, despite website crashes in North America and staff going on strike in Europe. The company's shares rose to a record \$1,856 on July 18th.

Novartis, a drugmaker, froze prices for its medicines in America. The move followed criticism of rising drugs prices from Mr Trump. **Pfizer**, another pharma company, recently delayed price rises.

Netflix, an online-streaming service, reported worse-than-expected subscriber growth in the second quarter of 2018. It added 5.2m new subscribers, compared with expectations of 6.2m. The company's shares dipped by 14% on the news, before recovering somewhat.

Bosses behaving badly



Elon Musk, the billionaire founder of Tesla, a car company, apologised to Vern Unsworth, a British diver, for calling him "pedo guy" on Twitter. Mr Unsworth, who assisted with the rescue of 12 boys and their football coach from a cave in Thailand, had ridiculed

Mr Musk's offer of a mini-submarine to help with the operation.

It emerged that American authorities are investigating allegations that **Uber**, a ride-hailing firm, discriminated against women in hiring and pay. This followed reports that Uber's head of human resources had resigned following an internal investigation, and that employees had filed complaints against its chief operating officer for making insensitive comments about women and minorities.

The International Energy Agency lamented a pause in the shift to **clean energy**. Global investment in renewable power fell by 7%, to \$298bn, last year. The share of fossil fuels in energy investment increased for the first time since 2014.

An abrupt ending

China's biggest budget film, "**Asura**", was pulled from cinemas after a spectacular flop on its opening weekend. The film cost \$112m to make, but earned only \$7m. It had been part-backed by Alibaba, an e-commerce giant.

For other economic data and news see Indicators section



A plan to save the WTO

Global trade is in grave danger. But there is still a chance of a rescue



of decisions taken in Washington.

President Donald Trump has circumvented the WTO to impose tariffs on steel and aluminium imports, including those from America's allies. Complaining of unfair treatment, the administration is blocking nominations to seats on the WTO's appellate body, which could leave it unable to hear cases after 2019. Most ominously, America is embroiled in a trade war with China. Both sides have imposed tariffs on goods worth tens of billions of dollars and are threatening worse.

The WTO was supposed to contain trade disputes and prevent retaliatory pile-ups. Today it appears to be a horrified bystander as the system it oversees crumbles. Free-traders are right to be deeply worried, but not yet right to despair. For the outlines of a plan to save the system are discernible.

It's the end of the WTO as we know it

That might seem fanciful, given Mr Trump's belligerence, but for two things. The first is that the president is not the only person forging American trade policy. The European Union and Japan have been talking to Robert Lighthizer, his low-profile chief trade negotiator, about WTO reform. Mr Trump's tirades make headlines, but Mr Lighthizer wants to remake the WTO, not abandon it entirely. He could use the president's threats as leverage to make deals. Think of it as a good cop/bad cop routine, albeit one in which the bad cop has only a faint grasp that he has been allotted the role.

The second thing to understand is that the focus of much of America's ire, China, arouses deep suspicion elsewhere, too (see Briefing). Since joining the WTO in 2001, China has not turned towards markets, as the West expected. Instead, it has distorted trade on a scale that is far bigger than the dumping and other causes of disputes between market economies that the WTO was designed to handle.

The EU and Japan share America's desire to constrain Chinese mercantilism. China's state-owned firms and its vast and opaque subsidies have distorted markets and caused gluts in supply for commodities such as steel. Foreign firms operating in China struggle against heavy-handed regulation, and are required to hand over their intellectual property as a condition of market access.

But holding China to account is hard with the existing rule book. The reforms being talked about by the EU, Japan and America could plug many of the gaps. They would set out how to judge the scale of government distortions to the market, make it easier to gather information on wrongdoing and set the boundaries for proportionate retaliation. They would also define what exactly counts as an arm of the government, and broaden the scope of banned subsidies. And they would low-

er the burden of proof for complainants, which, given the opacity of the Chinese system, is too high.

Even the sunniest optimist will be able to identify the obstacles to this plan. Most obviously, why would China ever accept a reform that jeopardises its state-run economic model? Put plainly, because America could wreak havoc otherwise. It is in China's interests to preserve the global trading order because, if China is isolated, the Communist Party cannot achieve the prosperity that cements its legitimacy. The benefits to China of its WTO membership have come not from lower tariffs in America—they were already low—but from the certainty of stable trading relationships. Its "Made in China 2025" plan to boost vital industries sounds threatening, but if China were obliged to produce everything at home, its time frame would be delayed by decades. Sure enough, China and the EU agreed on July 16th to co-operate on WTO reform (see China section).

Reaching a global agreement that covered every one of the WTO's 164 members would also be extremely difficult. The last big round of global trade talks stalled over demands by developing economies such as India for more leeway to protect farmers. New negotiations may be held hostage to these old disputes. Luckily, negotiators can skip around them if necessary, by securing a "plurilateral" agreement between a group of big economies. The WTO would still enforce the terms, though they would not apply to its other members.

Last comes the greatest block to a grand bargain, Mr Trump himself. The president is a fierce critic of the WTO and a believer that bilateral deals suit American interests better. This week he called the EU a "foe" on trade. If he thinks Mr Lighthizer is manipulating him, he will strike back.

And I feel slightly more upbeat than you might expect

A better idea than the Trump administration's wrecking strategy would have been to unite most of the world around a set of rules in America's interest, forming blocs so large that China would have had to choose between compliance and isolation. That was the idea behind both the Trans-Pacific Partnership (TPP), a pact from which Mr Trump withdrew within days of taking office, and also a stalled trade deal with Europe.

Wrecking strategies do not always fail, however. Sometimes they pay off handsomely. A WTO fit to handle complaints about unfair competition would be a gift to the world. The genius of the rules-based system is that it has torn down barriers by persuading producers that the prize of access to foreign markets is worth the accompanying global competition. When that competition is deemed lawless, political support for free trade withers. A world in which China is pursued by its critics through the WTO, and faces proportionate retaliation when necessary, is far preferable to one in which a tit-for-tat trade war can escalate without limit.

Mr Trump is hard to predict. He may yet abandon the WTO. If he does, other powers will probably go on building links and writing rules—witness the trade deal that the EU and Japan signed this week. But if Mr Lighthizer is able to present Mr Trump with an agreement that the president likes, the world trading system may yet be saved. It might even be improved. ■

Donald Trump's European tour

Humiliation in Helsinki

How to interpret a shameful press conference with Vladimir Putin



DONALD TRUMP likes to boast that he does things differently from his predecessors. That was certainly true of his trip to Europe. In Brussels he chided Germany for a gas deal that left it “totally controlled by Russia”. In England he humiliated his host, Theresa May, blasting her Brexit plan before holding her hand and hailing “the highest level of special” relationship. From his Scottish golf resort he called the European Union a “foe” on trade. And in Helsinki, asked whether Russia had attacked America’s democracy, he treated President Vladimir Putin as someone he trusts more than his own intelligence agencies. It was a rotten result for America and the world.

Americans were more than usually outraged. At the post-summit press conference in Helsinki, with the world watching and the American flag behind him, their head of state had appeared weak (see Europe section). He was unwilling to stand up for America in the face of an assault that had been graphically described three days earlier by Robert Mueller, the special counsel probing election meddling, in his indictment of 12 Russian military-intelligence officers (see Lexington). Republicans were among Mr Trump’s fiercest critics. “No prior president has ever abased himself more abjectly before a tyrant,” wrote Senator John McCain. Even Newt Gingrich, normally a staunch defender, decried “the most serious mistake of his presidency”. The reaction forced Mr Trump into a convoluted series of climbdowns, which did little to repair the damage.

Yet, for all his hostility towards allies and cosiness with Mr Putin, the trip could have been an even bigger disaster. Fears that Mr Trump might torpedo the NATO summit, as he had the G7 one, proved overblown. He put his name to a communiqué reaffirming the allies’ commitment to mutual defence and

their tough stance against Russia. Worries that with Mr Putin he might promise to roll back sanctions or recognise Russia’s annexation of Crimea proved groundless—as far as we can tell (the presidents met with only their interpreters present).

Mr Trump even did some useful things. He was right to press NATO allies to spend more on defence, even if his claim to have raised “vast amounts of money” is an exaggeration. And talking to his Russian counterpart makes sense. To be sure, Mr Trump’s hopes for a tremendous relationship with Mr Putin may end in a familiar disappointment: George W. Bush looked into Mr Putin’s eyes and detected a soul, and Russia invaded Georgia; Barack Obama pressed a “reset” button, and Russia invaded Ukraine. But America and Russia have a lot to discuss, not least on nuclear-arms control.

America worst

However, these gains come at too high a price. Mr Trump’s behaviour, a quixotic mix of poison and flattery, has further undermined Europeans’ trust in America. When asked about the Mueller probe and the decline in relations with Russia, Mr Trump said feebly that he holds “both countries responsible”. Perhaps his vanity does not allow him to treat seriously a Russian attack that he fears could tarnish his own election triumph. Perhaps, as some suspect, Mr Putin really does have material compromising Mr Trump. Either way, where America once aspired to be a beacon, relativism rules. That leaves all democracies more vulnerable.

Mr Putin, fresh from a successful World Cup, thus emerges as the winner in Helsinki. True, he may have scored an own goal in admitting that, yes, he had wanted Mr Trump to win the election. But a self-doubting West, damaged democracy and the spectacle of America’s president deferring to him on the world stage count as a hat-trick at the other end. In Helsinki Mr Putin looked smug. Mr Trump looked, at best, a mug. ■

Britain and the EU

The case for a second referendum

If Parliament cannot agree on a Brexit deal, the decision must go back to the people



THE new Brexit plan has crumpled on its first contact with reality. Faster than even we expected, Parliament has been seized by the idea that Theresa May might not be able to win a majority for a Brexit of any sort.

If nothing changes, the prime minister could break the jam in three ways: use crashing out of the European Union without a deal as a threat to get MPs to compromise; ask voters to elect a new Parliament that is up to the task; or, as the author Robert Harris says, hand “the screaming, defecating, vomiting baby back to its parents—the elector-

ate” for a second referendum. All three have problems but, if Brexit must be unblocked, a referendum would be least bad.

Mrs May’s plan, imposed on her cabinet this month at Chequers, her official country house, set Britain on the path to a “soft” Brexit. If the EU agrees to it, the country would, in effect, stay in the single market for goods, though not services. It would pay heed to EU standards and court rulings. Until the government could devise a way of collecting tariffs without border checks, Britain would remain in a customs union.

This plan was supposed to rally Conservatives. Instead the party is at war with itself. This week hard-Brexiteers claimed to have wrecked the Chequers plan by getting Mrs May to accept amendments that contradict it. Whether they are right or not ►►

► (Downing Street says not), it was a trial of strength and Mrs May lost. Alarmed Remainers then put up another amendment as a trial of strength of their own, which Mrs May won. Meanwhile, as those who think the Chequers plan is worse than what Britain has today call for a second referendum, members of the government are falling as fast as summer flies.

Chequers mate

Parliament will soon break for the holidays. If swimming, sangria and siestas fail to soothe MPs' nerves, Mrs May will face defeat in the autumn, as EU negotiators wring out concessions that make the deal even less palatable to its critics. Without enough Tory support to get her plan through, she cannot pick up votes on the hard Brexit side without losing them from Remain, and vice versa. Labour contains plenty of MPs who support a soft Brexit, and a minority who favour a hard one. But the criticism heaped on the handful who backed Mrs May in votes this week shows how, as she totters, they will be pressed to withhold their support in order to trigger an election.

What if Mrs May tried to corral MPs by threatening them with a disastrous "no deal" exit? The prospect is ominous. New border checks would swamp customs. Trade would be hit with tariffs and non-tariff barriers. That would harm big export industries like drugs and chemicals, as well as carmakers, which send four of their every ten cars to the EU. Aeroplanes might be grounded, for lack of a safety regime. The City could not do business. Security co-operation with the EU would halt.

This is a dangerous strategy. For the threat to be effective, Mrs May must be able to convince voters that it really would inflict harm. Yet a poll this week found that 39% of them back a no-deal exit, twice as many as are for Chequers.

If the no-deal threat is reckless, what about an election? Go-

ing to the country is the time-honoured way to refresh governments. It is straightforward and relatively fast. Mrs May beat the Remainers this week by threatening a vote of confidence.

But an election might not settle the matter. When Mrs May called one last year, she was left with a minority government, fatally damaging her authority. That outcome could easily be repeated. An election would offer voters a choice between Mrs May's warts-and-all compromise and a fantasy Labour Brexit that avoided all the hard choices the EU insists on. Polls give Labour a five-point lead. An election would mix up Brexit with everything else—health, the economy, defence and fear of the divisive leader of the opposition, Jeremy Corbyn.

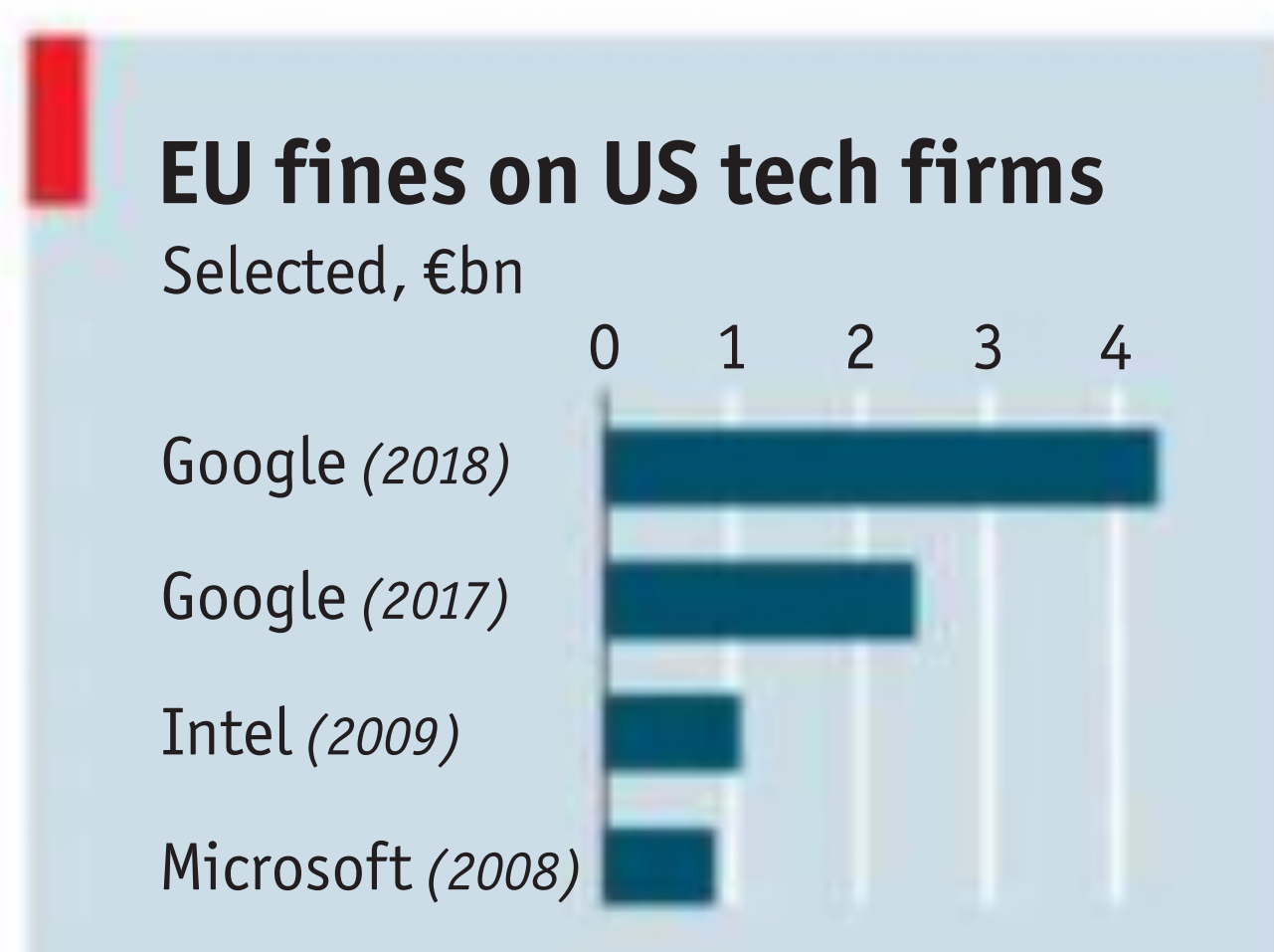
That leaves a referendum. In its favour, a new referendum is the purest way of overturning the old one or forcing Remainers to accept Brexit. But it would be hard to pull off. Unlike an election, a referendum requires legislation and could take months (see Britain section). A simple, binary choice would be clearer than one MP's suggestion of a three-way one. The alternatives should be between staying in the EU and the plan that emerges from negotiations with the European Commission. For this to be credible, the EU would have to agree that Brexit could be reversed. Unlike the chimeras of the first referendum campaign, the choice facing voters could at least be costed and debated.

Be in no doubt, a referendum is a desperate remedy. No matter that Brexiteers deserve most of the blame for failing to come up with a plan that could win the assent of the EU and the trust of the country. They will inevitably see a referendum as a betrayal, depicting it as a stitch-up in which Mrs May first neutered Brexit and then schemed to give Remainers a second chance. Even as a last resort, a referendum would thus leave Britain divided and unhappy. How much better if Parliament were to spare the people and make up its mind. ■

Europe v Google

High fines, meagre results

The European Commission is right to tackle the tech titans, but its remedies are wanting



HOW high can they go? On July 18th the European Commission hit Google with a record fine of €4.3bn (\$5bn) for entrenching its dominance in internet search by illegally tying together this service and other mobile apps with Android, the firm's mobile operating system. A year ago the commission levied a fine of €2.4bn on Google for using its clout in search to steer users away from rival offerings and towards its own comparison-shopping service. At this rate of inflation, the next fine—there is one other case against Google pending in Brussels, with more expected—could reach the maximum allowed: 10% of the firm's global revenues, or about €9bn.

The size of the fines hides an inconvenient truth, however. The commission deserves credit for scrutinising the behaviour of dominant online firms—its activism stands in pointed contrast to supine American authorities. However, none of its antitrust actions in recent years has done much to strengthen competition. Depressingly, this outcome may suit everyone. High fines win the commission glowing headlines (and boost

the chances of Margrethe Vestager, the competition chief, becoming the commission's next president). Google, for its part, protests loudly but treats the penalty as a cost of doing business. This week's fine amounts to only 5% of Google's current net cash balance. Nothing really changes.

Not that paranoid about Android

If that sounds cynical, look at the Android case more closely. Google requires smartphone-makers and mobile operators to sign strict agreements if they want to use any of its apps. For instance, if device-makers want to install Google's app store—which in most markets they must in order to make their gadgets attractive to users—they also have to install all of Google's apps, including the one for its search service. They must give these apps top billing on users' screens, too. And if they use Google's apps and its version of Android on any of their models, they have to do so on all of them (see Business section).

Unsurprisingly, Google argues that these restrictions are for the good of consumers. They ensure, for instance, that people always have a familiar set of apps on their home screen and that Android does not splinter into incompatible versions. Yet what Google calls "fragmentation" is actually competition, as ►►

► China's vibrant mobile market shows. Because Google Play is not available there, device-makers that use Android are not compelled to install the firm's apps but can pick and choose. The web of rules elsewhere is designed above all to protect Google's search service and its moneymaking advertising business. The commission is right to find Google guilty.

Yet its remedies fall short. The commission wants Google itself to come up with remedies, which in effect means dropping all the restrictions it imposes on device-makers. But that alone is unlikely to be enough to restore competition quickly because of the dominance of Google's version of Android, which powers 80% of smartphones in Europe. A similar approach in the market for comparison-shopping services has been ineffectual. Rivals still appear in only 6% of the slots available on the European version of Google's search engine. Tougher remedies would include compelling Google to allow competing app stores to distribute its apps, which would make it easier for

other firms to launch competing app stores. Another option would be to give consumers a choice, when they first boot up their phone, over which apps they want to use as defaults (much as the commission once required for browsers on PCs).

If it really wants to merit the accolades it gets for tackling the tech titans, the commission needs not only to be more forceful but also to act more swiftly. The comparison-shopping case was seven years old by the time it was decided; most of Google's rivals had already succumbed. Gearing up for a set-piece antitrust battle is a mistake in such a fast-moving industry. The commission should instead go for quicker wins, for example by rapidly knocking down any new limitations on rivals' services and apps.

Europe is a less friendly environment than America for the tech giants. But it has not so far achieved much more in terms of promoting competition than the regulators across the Atlantic. That is a disappointment as big as any fine. ■

Pakistan's election

Foul play

Time for the generals to stop meddling in politics



AS A fast bowler, Imran Khan made rival batsmen quake and led Pakistan to victory in the Cricket World Cup in 1992. As a politician, he is thundering towards the election on July 25th and appears to be on the point of scoring another famous victory.

Polls suggest his party, Pakistan Tehreek-e-Insaf (PTI), may emerge as the largest; and Mr Khan may well become the country's next prime minister.

Yet, as a pukka sportsman, can Mr Khan really be happy? Although he and Pakistan's army deny foul play, the match has been rigged. The army is ensuring that the PTI enjoys privileged access to media, endorsements from powerful people and defections from rival parties. Nawaz Sharif, a three-term former prime minister, and his daughter, Maryam, were arrested as they stepped off a plane from London on July 13th. A campaign of harassment and arrest has affected other parties' workers far more than the PTI's. More murkily, the others have also suffered assassination attempts and terrorist attacks, among them a suicide-bomb that killed 149 people at a rally for a local party in Mastung, in Balochistan, on July 13th.

The generals have long pulled the strings of Pakistani politics. But rarely, short of taking power themselves, have they meddled so brazenly. Pakistan's miserable failure to develop a stable democracy compares ever more starkly with the rude progress of its arch-rival, India.

The khaki umpire

Whether in the 1970s in the era of Zulfikar Ali Bhutto, or in the 1990s during Mr Sharif's earlier terms, the army's "jeep-wallahs" first endorsed and promoted pliant civilian leaders, then squeezed them when they grew too independent, and in the end got rid of them.

Mr Sharif lent his name to his party, the Pakistan Muslim League-Nawaz (PML-N), which held a majority in the outgoing

assembly. He was forced from office last year after judges upheld a petty charge of failure to disclose a company directorship, then banned him from politics for life in April; he was later given ten years in prison on more serious charges of hiding assets abroad. By returning to Pakistan to face jail, Mr Sharif has turned himself from a grubby politician into something of a martyr. Nobody quite knows why the army turned against him. Most probably it thought him uppity—making overtures to India, for instance or for his quiet questioning of the deep state's attachment to unsavoury Islamists.

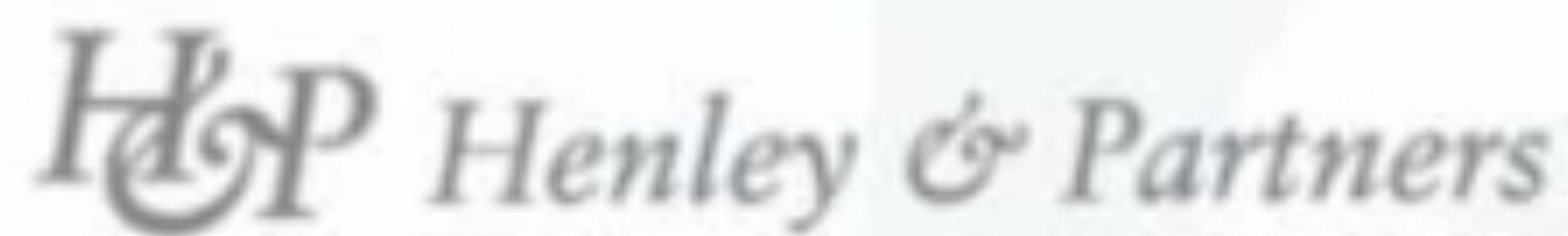
Mr Khan, for his part, started off posing as an anti-establishment politician, railing against the corrupt duopoly of PML-N and its rival, the Pakistan Peoples Party, founded by Bhutto and later led by his daughter, Benazir, who was assassinated in 2007. Mr Khan shows little interest in foreign affairs beyond ranting against America. He chirrup hardline views on such issues as punishing blasphemy with death. Perhaps, some think, he will even form a coalition with ultra-extremists.

However, one thing that sets this election apart from previous ones is the greater outcry over the army's match-fixing. Prominent journalists and some of the country's largest media groups say they have been threatened and coerced into promoting the PTI and muting coverage of its rivals. At a press conference on July 16th Pakistan's Human Rights Commission, an NGO, declared that there were ample grounds to question the legitimacy of the elections, warning of "blatant, aggressive and unabashed attempts to manipulate the outcome".

Pakistani voters may yet rebuke the generals. But outsiders can do little to restrain the army, now that Pakistan is moving further into China's orbit. Mr Khan, who is profiting from army support today, should be aware that he will pay for it tomorrow when the generals come calling.

As for the jeep-wallahs, they must see that they are harming the country they claim to defend. In the 70 years since partition, Pakistan has been torn by war, terrorism, coups, instability and religious extremism. It has lagged ever further behind India economically and on other fronts—including cricket. ■

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Why is populism so popular?

Your analysis of the reverse wave of democratisation towards authoritarianism was fascinating (“Democracy’s retreat”, June 16th). There is a fundamental question that underpins this tragic dynamic. If liberal democracy is so superior to other systems, how come so many people have turned away from it in mature and consolidating democracies? To answer it, one has to step outside the intellectual hubris of policy practitioners and allow for the possibility that the liberal democratic triumph after the end of the cold war has also fostered a sense of false ideological supremacy.

Just like previous historical instances of ideological hubris, this has stifled open and honest discussion; in this case about the true meaning of pluralism. As a result, the ideological orthodoxy of the post-cold-war liberal democratic creed has generated a tidal wave of populism and chaotic authoritarianism. If Plato is right what comes next will be even worse: tyranny.

LIUBOMIR TOPALOFF
Associate professor of political science
Meiji University
Tokyo

The original campaign group

Bagehot claimed that Brexiters are one of the most successful pressure groups in British history, second only to the Anti-Corn Law Leaguers (June 16th). But what about the campaign to abolish slavery? Initially led by a quirky mix of Quakers and evangelical Christians, it pioneered innovative tactics, including the widespread boycott of sugar, tireless lobbying and media propaganda.

What began as the eccentric view of a swivel-eyed pressure group became government policy. Within 25 years, the immensely powerful Royal Navy went from protecting the maritime slave trade to shutting it down and seizing slave ships. The modern-day political equivalent for the Brexit-

eers would be not merely to detach Britain from Europe, but also to get Brussels to dissolve the European Union.

MICK O’CONNELL
Associate professor
School of Psychology
University College Dublin

Too much information

Certainly the miracles of digital technology will eventually find a use in medical practice (“From A&E to AI”, June 9th). Many in medicine, however, are still feeling the sting of the last digital revolution: the introduction of electronic medical records. Google Maps can show me which direction to take if I’m lost, but my electronic medical record can’t graph a patient’s blood-sugar values with insulin administration over time.

Not only did these software systems fail to live up to the hype of safer, faster and cheaper care, they have also proven for many doctors to be a costly, confusing, time-consuming, burn-out-inducing nightmare.

DR DANIEL PENNINGTON
Mason City, Iowa

Nattering nabobs



Johnson pondered whether “the country of Lincoln, MLK and JFK” is on an “irreversible slide towards the rhetoric of the sewer” (June 23rd). There is nothing new about American politicians “dehumanising their adversaries”.

Supporters of Andrew Jackson were angered by the accusation that his mother was a “common prostitute”. His wife, Rachel, was called an adulteress (she mistakenly thought her first husband had secured a divorce before she married Jackson).

Whether it was calling John Adams “a hideous hermaphroditical character” or Grover Cleveland a “moral leper”, based on allegations that he had fathered an illegitimate child, the lexicon of American political language has often been filled with vitriolic phrases. This is more an indication of a functioning democracy than symptomatic of its inevitable demise.

CHAD IDEN
Columbus, Georgia

Data sampling

One of the suggestions in your special report on decentralising the internet is that big companies should let startups and small firms have access to their data (without identifying users) so that they can analyse the data for themselves (June 30th). This is impractical because of the huge size of the data files, which small companies can’t handle. A better way might be to require each of the big companies to build a representative sample of, say, 1m or 2m records.

If the goal is applying machine learning in order to reveal interesting patterns that can be used for issuing predictions for new records from the same population, and when the frequency of the value under analysis (say, whether or not person likes product A) is at least 1%, 1m or 2m records are quite sufficient for revealing the valid patterns in the data. Going from 1m to 100m improves the accuracy just marginally, and usually the improvement is negligible.

ABRAHAM MEIDAN
Chief executive
WizSoft
Tel Aviv

Solar eclipsed

You focused on the recent brake on subsidies to the solar industry in China (“On the solarcoaster”, June 16th). It is also worth mentioning a new and little-noticed change in America. Amid the aggressive imposition of Section 201 and 301 tariffs on solar imports, the Internal Revenue Service has quietly extended the generous

investment tax-credit for solar developers, which was meant to be phased out after 2019, for four years. While Donald Trump acts tough on China, the United States now has some of the world’s most generous solar tariffs, as China slashes its own. Perhaps the sun will indeed come out tomorrow.

SHAWN KRAVETZ
President
Esplanade Capital
Boston

Meeting of minds

Regarding Bartleby’s musings on the futility of meetings (June 30th), I can tell you that it is easy to run them efficiently. A meeting must have an agenda, and the chair must shut down extra-loquacious presenters who get carried away and call on juniors to speak, as they may have a valuable comment to make. But to speed things up have a meeting with no chairs and hold it on a Friday at the end of day. I guarantee it will be short.

RICHARD GYURO
Eagle Point, Oregon

Bartleby’s bestiary of bothersome babblers omits at least two: the Archival Archies, who command the lore of how things were once done; and the Naysaying Nellies, who have never met a proposal for change they approve of.

REED BROWNING
Granville, Ohio

I have been trying to get our IT department to make a small change to the electronic calendars we all use. Next to the option of whether to accept or reject an invitation to a meeting, I would like a big button labelled “why?”, with a sizeable question-mark. Alas, there has been no change.

STEFAN DOBREV
Gland, Switzerland ■

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Trade blockage

Amid the cannonades of a global trade war a peace plan may be emerging

“**M**AN is an animal that makes bargains,” said Adam Smith, the father of modern economics and a champion of free trade. After reminding his American counterpart of this quote in May, the Chinese ambassador to the World Trade Organisation (WTO) added a request. “As trade negotiators, let’s bargain with each other, instead of biting each other.” Publicly, at least, the administration of Donald Trump has only bared its fangs.

Mr Trump is waging a trade war that this year has already hit imports worth over \$89bn in 2017, including \$32bn of goods from China, and \$48bn of steel and aluminium (see chart 1 on next page). The fight will intensify. America plans further tariffs on \$208bn of Chinese imports and is threatening duties on imported vehicles and car parts that will hit European and Japanese firms hard. As well as generating trade disputes with new tariffs, America is also gumming up the WTO’s system for solving them, by blocking the appointment of judges to its Court of Appeals.

Mr Trump’s assault on the multilateral rules-based system threatens decades of trade liberalisation, which has nudged average tariffs between America, Europe and Japan down from 22% when the system started in 1947 to around 3% by 2000, roughly where they remain today (see

chart 2 on next page). Supporters of the system, both beyond the Trump administration and throughout most of the rest of the world, fear that America’s president is intent on destroying the WTO and undoing this progress. They are right to worry but may be wrong to despair. A plan is brewing to save the WTO from being torn apart in the Trump administration’s jaws.

At the core of modern-day multilateralism is the idea that countries sign up to a set of clear commitments. The WTO’s members promise not to raise tariffs above agreed levels and to apply them based on the principle of “most favoured nation” (MFN). Applied strictly, countries should not be able to discriminate between their economic friends and foes, because a lower tariff granted to one member should be granted to all. China’s membership, for example, means it must apply equal tariffs on cars coming from the EU and America. And America signs up to the same treatment of cars from China and the EU.

The system is supposed to be self-reinforcing. WTO membership involves a trade-off, between the costs of compliance and the benefits of maintaining access to a 164-strong club accounting for 98% of world trade. When deals are first struck, negotiators bargain so that the benefits of trade liberalisation outweigh the political

penalties. If the penalties turn out to be greater than expected, the system has built-in safety valves. If imports are surging, subsidised or sold below cost, threatening domestic industries and jobs, members can apply defensive duties. And since 1995, if one member suspects another of rule-breaking, they have had the case heard by the WTO’s panel of judges. If these arbiters decide there has been wrongdoing, they can sanction limited retaliation. The pinch of such tariffs and the shame of being labelled a rule-breaker are both supposed to ensure good behaviour.

WTO Out

Understanding the American assault on this system requires identifying its various fronts. The first is driven by Mr Trump’s disregard for rules. According to Axios, an American news website, he is itching to withdraw from the WTO altogether. Unshackled from the MFN principle, Mr Trump would be free to enact his own version of reciprocal trade, with tariffs that match those applied by other countries.

The prospects of an American exit are slim, as it would require the approval of Congress. But in the meantime the Trump administration is doing damage from within. Its claim that imports of steel and aluminium pose a threat to national security exploits a loophole that allows WTO members to impose tariffs in times of national emergency. Unconcerned by the erosion of trust this causes, or by damage ►►

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► from retaliation and higher metal prices at home, Mr Trump is undermining a set of norms that Americans have spent decades trying to build.

Such bullying is specific to this president. America's trading partners hit by its tariffs on steel and aluminium have so far tried to strike back within the rules, or in proportion to the damage done to them. Eight have launched formal WTO disputes. At home Mr Trump's tariffs on Canadian steel and aluminium have prompted a bipartisan chorus of disapproval.

But other fronts in the Trump administration's trade policy have greater sticking power. They are being pushed by Robert Lighthizer, the United States Trade Representative (USTR), whose influence in the White House is in stark contrast to his low profile outside it. Unlike many in the administration, he understands how the global trading system works, from experience as a trade lawyer and as a trade negotiator in the Reagan administration. He appreciates the system's value, conceding in December that the WTO does "an enormous amount of good". And crucially, his complaints about it are shared by many in Washington, DC, and across the world.

Judge not...

Two stand out. The first relates to the WTO's appellate body—the system's supreme court. Members must unanimously approve judges to sit on a roster of seven, from which three are chosen to hear any given case. But as vacancies have arisen, the Trump administration has refused to let them be filled. From December 2019, there will be fewer judges than the minimum required to hear a case.

The Americans complain that the appellate body has become too big for its boots. Since 2011 it has not consulted WTO members when exceeding the 90-day limit to conclude a case. Often its reports are long, in part because judges make legal commentaries on arguments that were not presented by either side. To some, this is careful and principled application of the law. To others, it looks like empire-building.

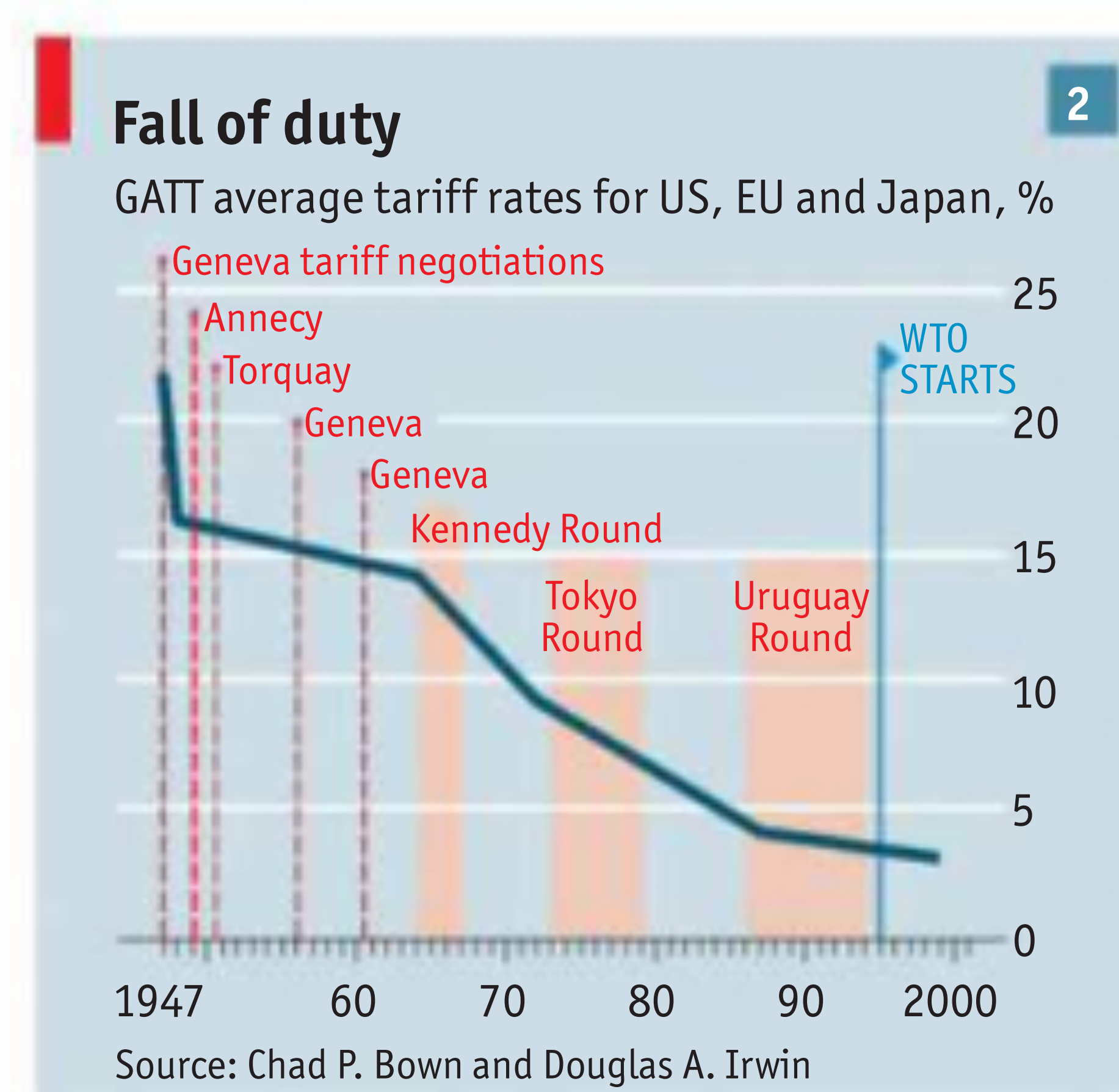
More fundamentally, Mr Lighthizer fumes that this body has overstepped its remit. America's gripe is that rulings have impeded its ability to use the WTO's pressure valves. In 2003 the Bush administration was told that duties imposed to combat surging steel imports violated WTO law. (The duties were subsequently withdrawn.) In a series of cases the body has also found that the way America applies anti-dumping duties breaks WTO rules.

One particularly painful decision relates to what exactly counts as a "public body" within WTO rules. In general, members are allowed to apply defensive duties on imports supported by government subsidies. But in China, knowing where the government ends and the private sector starts is tricky. The Americans had claimed that where the government owned a majority stake in an enterprise, it should automatically count as a "public body" liable for handing out subsidies. But the appellate body ruled against them, making it harder to apply defensive duties against state-supported production.

This leads to Mr Lighthizer's second set of grievances, regarding China's place in the trading system. He claims that, when WTO negotiators agreed that China should join in 2001, they expected it to evolve towards Western-style capitalism. What has emerged instead is an economy dominated by state-subsidised enterprises with a regulatory regime geared towards the theft of American intellectual property. As a result, the system does not work.

Take first the American concerns over China's industrial policy. The WTO's rulebook has a chapter curbing state subsidies. But it has gaps, in part because when it was written American and European negotiators were nervous of subjecting their own subsidy regimes to scrutiny and did not expect China to generate the resources to hand out vast sums of cash. Now, given China's size and systemic importance, those holes look too big.

Next is the accusation that China defies the spirit, if not the letter, of the rules of the WTO. In many industries, China's govern-



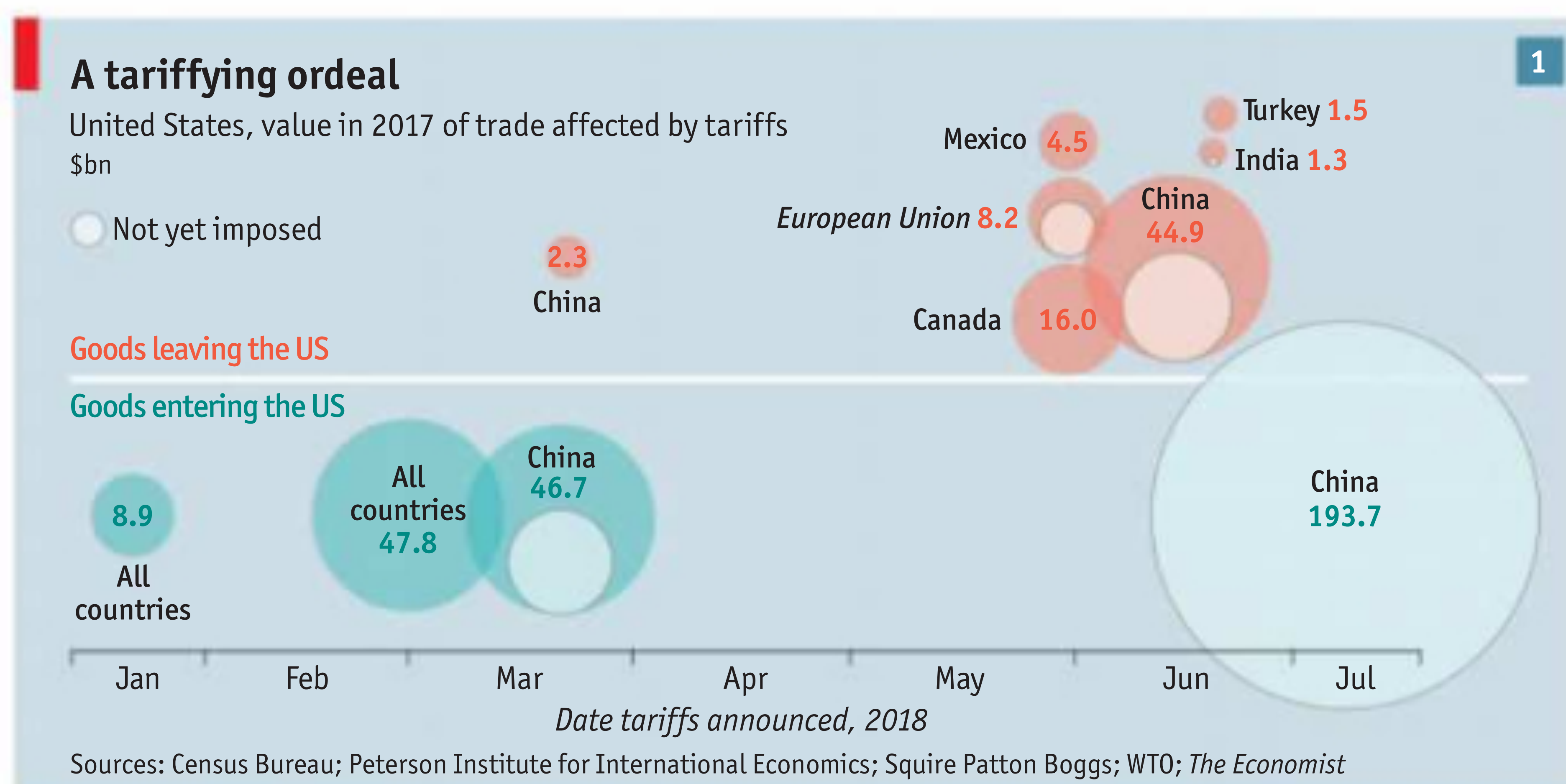
ment required that foreign firms investing in its market did so in joint ventures with local companies. The Americans complain that too often their firms had to hand over technology as a condition of access to the Chinese market, and then watched helplessly as partners ran off with their ideas.

Mr Lighthizer's concerns over the appellate body and China could be dealt with by negotiation, either to revisit past decisions or to fill gaps in the WTO's rules. But getting China to the negotiating table has proved hard. When it joined the WTO its accession protocol was unusually strict. It reckoned that it had already paid enough into the system, and was not about to negotiate new definitions of public bodies that could tie its hands further.

Then there is the broader problem of getting anything new agreed on multilaterally. That requires the unanimous approval of all 164 members. For years, WTO negotiations have stalled over a disagreement between richer countries, which think everyone should share a common rulebook, and those who see carve-outs for poorer countries as necessary to protect their farmers and foster development. Members like India and South Africa have been happy to hold any deal hostage to their agenda.

An earlier American solution to this gridlock was to pursue ambitious regional trade deals. In Asia the Obama administration agreed the Trans-Pacific Partnership (TPP), to link America to 11 economies of the Pacific Rim, including Japan and Singapore. It included tougher rules on state-owned enterprises. Meanwhile, it was also negotiating the Transatlantic Trade and Investment Partnership with the EU. Combining them could have created a free-trade area large enough to tempt the Chinese to the negotiating table, as well as a regulatory regime with enough weight to pull against the Chinese one.

After Mr Trump swiftly jettisoned that approach, Mr Lighthizer is spearheading a quicker, dirtier one. Dusting off an old piece of trade law, he has used Section 301 of the Trade Act of 1974 to accuse the Chinese of causing harm to America's economy. Some supposed misdemeanours fall ►►



▶ within the WTO's rules, and so the USTR has launched an official WTO dispute. Others, which Mr Lighthizer claims relate to gaps in the rulebook, are the justification for punitive American tariffs.

This looks like a worrying bout of unilateralism, reminiscent of the 1980s, when Section 301 was used by the Reagan administration to threaten Japan with tariffs unless it curbed its exports to America. The resulting tangle of restrictions made free traders squirm, but advocates argued that aggression served a higher purpose. It rallied the rest of the world around stronger trade-enforcement rules, which led to the creation of the WTO's system of dispute settlement. This time Mr Lighthizer seems to be trying to weaken that system.

Further worry stems from the fact that it is unclear how the trade conflict with the Chinese will end, but easy to see how it might escalate. Mr Lighthizer's department has launched five formal disputes at the WTO in response to retaliatory duties against America's levies on steel and aluminium. In response to China's ones, the plan is for more American tariffs.

Lighthizer at the end of the tunnel?

Yet, amid the conflict there is still hope of salvaging a peace. As the trade cannons blast, efforts are being made to restore order. The chances of success rest on the fact that Mr Lighthizer's concerns about China are shared by others, and in particular by the EU and Japan.

The EU sees an opportunity to act as a bridge between China and America to negotiate new rules. It thereby hopes to address its own concerns over China's rise, while tempting America back into the multilateral system. The EU may disagree with Mr Trump's approach to China, but it recognises that it could harness America's aggression as a way to get China to agree to new constraints. The plan is to make China's choice clear, between an unstable trading system and one with new rules that meet the others' concerns.

The first hint of co-operation came last December, when Mr Lighthizer added his name, along with those of his counterparts from Japan and the EU, to a brief statement voicing shared concerns over "unfair competitive conditions caused by large market-distorting subsidies and state-owned enterprises". China, though unnamed, was clearly the target. Since then, officials from all three places have been discussing what new WTO rules might look like. And on July 16th the EU launched a working group with the Chinese to discuss reform of the multilateral system. The trilateral talks between America, the EU and Japan are meant as an incubator for rules that could be taken to China; those between the EU and China are designed to be a sounding-board for those ideas and to prepare the ground for a proper negotiation.

A joint statement on May 31st outlined the scope of the trilateral talks. First on the agenda is the dull but important topic of notifications. Tariffs are obvious to observers, subsidies less so. To counter that problem, WTO members are supposed to notify others about support they hand out. But without penalties for failing to do so, many do not. The three are designing a way to strengthen the incentives to comply.

Second, the trio are trying to overturn the appellate judges' definition of "public bodies", by broadening it to make it easier to deem a state-owned enterprise to be an arm of the Chinese government. And third, the three are discussing new rules that would not only strengthen members' defences against Chinese subsidies but also limit them at the source.

Meanwhile, the EU has drawn up plans to tweak the appellate body's rules in a way that it hopes will satisfy America. Poor judicial decisions are in the eye of the beholder, so no procedural change could solve that. But the EU's proposal answers a number of complaints, including clarifications to the way outgoing judges' cases are handled after their term ends.

Perhaps a grand bargain is in the works. Comfortingly, there is mounting evidence that Mr Lighthizer is not out to torpedo the WTO. This year his department has filed seven new official WTO disputes, engaged actively in discussions over new rules on e-commerce, and on July 16th even called for an end to the WTO's impasse on agriculture negotiations, suggesting that the talks should focus on market access.

Even so, the chances of success are slim. Some American concerns are difficult to deal with under the WTO's legalistic processes. These work best when Chinese laws can be compared with official commitments. But with technology transfer,

for example, America claims that unwritten rules force firms to hand over their technology as a condition of doing business. That makes it hard to write watertight regulations and to test them in the WTO's court, particularly if the firms involved are too scared to speak for fear of losing access to the Chinese market.

Even if America, the EU and Japan do manage to draw up what they see as a perfect set of new rules, China may not play along. It wants a stable trading system and will pay attention to a co-ordinated bombardment from its biggest markets, but it will not sign up if it thinks it will be made poorer in the long run. The Americans would like to draw up new rules without the Chinese at the table, then ram them down their throats. That would be unacceptable to the Chinese.

The next challenge will be obtaining wider agreement to a deal concocted by only four members. To poorer countries, the idea that America can be rewarded for throwing a tantrum by winning a reform of the system will be deeply distasteful. They believe that richer countries have already tipped the rules in their favour. That is why the joint statement in May included hints about bypassing the WTO's crippling requirement for consensus, instead opting for getting a "critical mass" of countries to agree.

Brink it on

Another risk to the plan is Mr Trump himself. Mr Lighthizer may be a brilliant strategist, capitalising on his boss's willingness to blow up the system in order to force the change that he wants. But he could easily fall out of favour. The plan relies on Mr Trump playing along and stepping back from the brink at the right time. He could go too early, bought off by an offer from China's president, Xi Jinping, to buy more American goods without bringing any reform to the system. Or he could hang on too long, turning the confrontation with China into one only about power and face, and not one about trade and rules.

Seen from one angle, the Americans are making a last-ditch effort to reshape the system they founded to serve their own interests. Unless they do it now, they reckon, China will become too powerful to contain. Perhaps that moment has already passed. In the 1980s, when the Reagan administration acted against Japanese trade practices, Japan's GDP was around 40% of America's. But this year, according to the IMF, China's GDP will be 69% of America's, rising to 88% over the next five years.

The Chinese may call America's bluff, hoping that when Mr Trump goes in two or six years' time, the next president will be less keen to tax his citizens by raising the cost of imports. If so, expect tariffs to continue. And for the multilateral rules-based system to become still more toothless. ■





Also in this section

20 How secure are elections?

21 Mansplaining voters

22 The flourishing Midwest

23 Lexington: A legitimacy problem

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Unions

The god of beginnings and endings

WASHINGTON, DC

How Janus, the Supreme Court's ruling on union dues, could change American life

EVEN before the Supreme Court piled in, American unions were in a bad way. In their heyday in the mid-1950s, more than 30% of workers were members. Today just 11% are. With only a toehold in the private sector—where they cover a mere 7% of workers—unions have become increasingly reliant on faithful public-sector employees, 34% of whom are members, to stay financially afloat and politically relevant. The Supreme Court's ruling in the case of *Janus v AFSCME* at the end of June will shrink the rump of union members even further. What will the consequences of even lower union membership be?

Unions engage in both collective bargaining for their workers and political lobbying, typically for progressive causes and Democratic candidates. Among white Americans, blue-collar workers have had their heads turned by President Donald Trump even as union bosses remain steadfast Democrats, so that many members disagree with their union's politics. Opting out of union membership—and its mandatory dues—would allow them to benefit from negotiated pay rises and holidays without incurring any of the cost. For decades, the compromise had been to make non-members who would otherwise free-ride on collective-bargaining agreements pay “agency fees”—the share of union dues that go to non-political operations and

overheads. In its *Janus* decision, conservative jurists on the Supreme Court cited the First Amendment, to hold that such schemes violated the constitution on free-speech grounds. All public-sector workers covered by a union will now have to opt in and consent before paying anything. It is not a question of whether unions will lose members as a result of this, but how many.

Wisconsin provides one case study. When that state passed a law in 2011 limiting collective bargaining and banning agency fees its teachers' union lost more than half its members and two-thirds of its dues within three years. Teachers' unions, among the most powerful in the country,

Union station

United States, trade-union membership
% of employed

could lose a third of their members as a result of the decision.

That may reflect some dissatisfaction, but it probably has more to do with the attractive offer of keeping a union-negotiated contract while avoiding deductions from already cramped pay-cheques. “It was a way to get \$800 a year in dues, after they had not gotten a raise in five years,” says David Crim, an organiser for the Michigan Education Association. The union lost one-sixth of its membership after the state became “right-to-work”—banning collection of agency fees through state law rather than the courts—in 2012. “They’re virtually getting something for nothing,” says Kate Martin, a community college teacher and treasurer for her local union chapter in Cape Cod. “In the short term, you can get a bump in pay. In the long term, you’re going to lose benefits and suffer worse working conditions,” she adds.

Wasting no time, organisations like the Mackinac Centre, a conservative think-tank based in Michigan, have already put up websites encouraging workers to ditch their unions and retain their benefits, including a helpful service which will automatically write a pre-addressed resignation letter. The centre, which has long-standing ties to Betsy DeVos, the education secretary and a bogeyman on the left, has begun directly contacting teachers on their official e-mail accounts in 11 states.

To counter these efforts, union organisers will have to work hard to convince dues-paying members to stay. They are doing so by suggesting that conservatives are mounting an attack on all working people, who must stick together in the face of adversity. “It’s all about defunding us,” says Randi Weingarten, the president of the American Federation of Teachers (AFT), a ▶▶

► labour union with 1.7m members. In the run-up to the *Janus* decision, unions asked their members to pledge “I’m sticking with my union” no matter what the court decided. Of the AFT’s 800,000 members in states affected by *Janus*, 530,000 had signed such a commitment before the decision was released, according to Ms Weingarten. Heavily Democratic states, like New York and California, are also passing laws to soften the blow, by insisting that unions are given contact information for new workers and strictly limiting the time period in which employees could revoke their membership.

The Piketty line

Economists have long debated the merit of unions. Classical economists tend to see them as localised monopolies on labour, which impose deadweight losses. A recent interpretation of their effect is more neutral: unions may be a countervailing force to monopsony, or the market power that firms have over wages and competition for workers. For example, until recently seven large American fast-food chains held “no-poach agreements” preventing their workers from switching franchises. They were dropped when state attorneys-general threatened to sue. Across the OECD club of mostly rich countries, unionisation rates in the private sector have steadily fallen. Public-sector workers have been insulated from this, in part because governments are not profit-maximising and in part because teaching cannot be outsourced to China.

One unintended consequence of the slow demise of American unions could be worsening income inequality. Labour-market researchers note that when unionisation was at its zenith, income inequality was at its nadir. A recent working paper by Henry Farber, Daniel Herbst, Ilyana Kuziemko and Suresh Naidu used a new data set spanning the last 80 years to show that this inverse correlation remains robust in the face of attempts to control for changes wrought by globalisation and technology. Their research suggests a simple mechanism for this association. Union members have earned up to 20% more than similarly qualified workers throughout this period. During the halcyon days of unionisation, unskilled workers were more likely to be members, so this earnings boost helped to hoist them into higher tax brackets and reduce inequality. As unions have shrunk, they have also shed low-skilled workers.

Smaller unions will spend less money on politicking, as they use their dwindling resources to hold on to members and stanch the flow of free-riders. That could make school reform, which teachers’ unions have often blocked, easier to pursue. During the 2016 election cycle, organised labour spent \$217m—88% of it going to Democrats, according to the Centre for Responsive Politics, which keeps score. There

will also be fewer members to go out and knock on doors. A clever study, published in January 2018 by James Feigenbaum, Alexander Hertel-Fernandez and Vanessa Williamson, measured the political consequences of declining unionisation by looking at counties bordering states that adopted right-to-work laws. The researchers found that such laws not only reduced union contributions and get-out-the-vote efforts, as expected, but they also depressed the vote for Democratic presidential candidates by 3.5 percentage points.

Electoral benefits help explain the zeal for diminishing union clout. Unions already fear that the expansive *Janus* opinion could invite future legal challenges to private-sector agency fees as well. When pushing right-to-work laws, Grover Norquist, an anti-tax activist, predicted that if a dozen more states adopted Wisconsin’s model, “the modern Democratic party will cease to be a competitive power in American politics”. That is wishful thinking: parties adapt; Democrats have already spent decades reckoning with declining union power. Yet unions have often had a moderating influence on the Democratic Party, pulling it back to a focus on the economic interests of workers when activists might prefer to concentrate on guns, abortion or the environment. The withering of unions will remove that counterbalance. ■

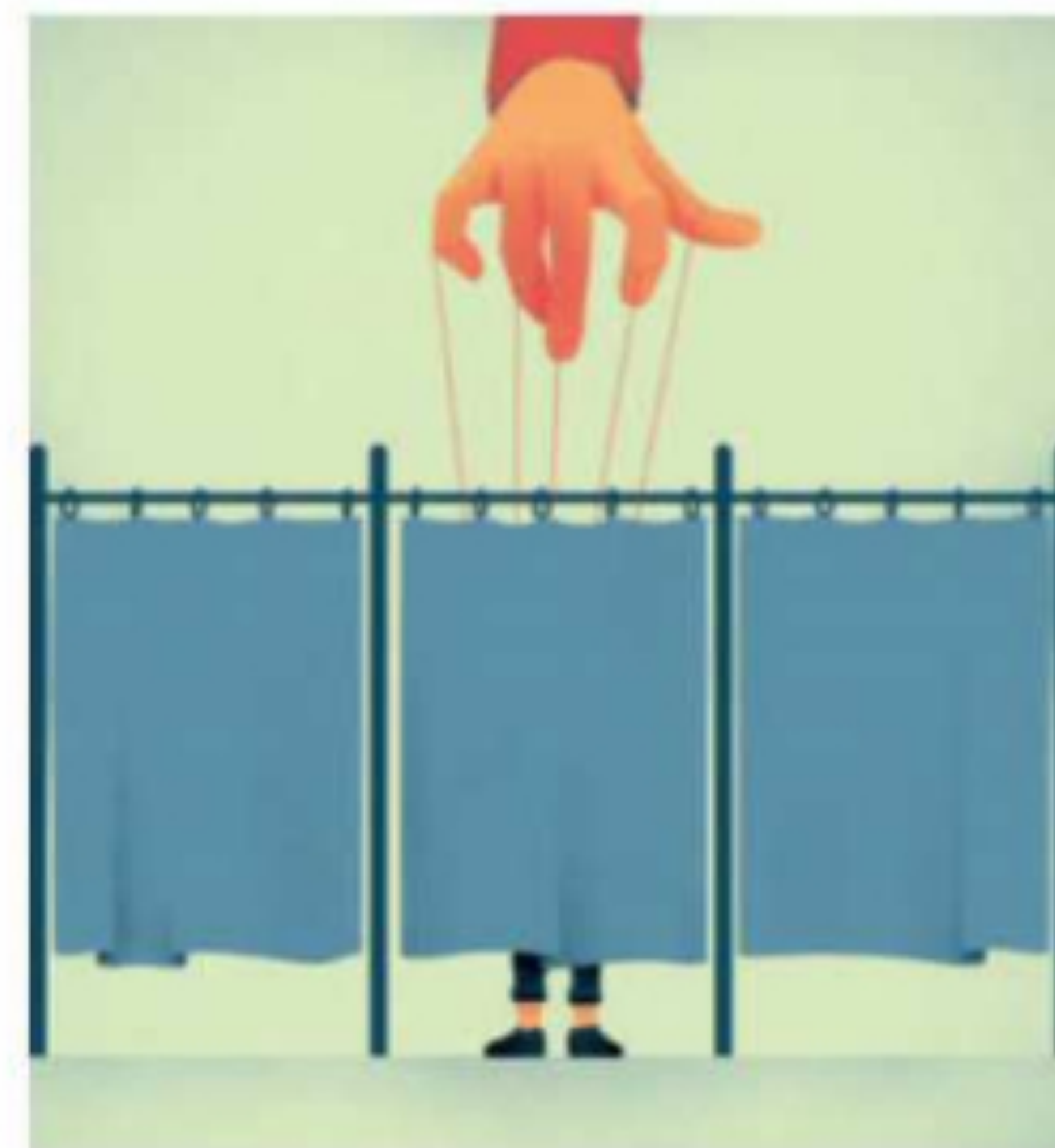
Election interference

GRU II

Voting machines are reassuringly hard to hack; voter rolls are not

IN THE run-up to the attacks of September 11th 2001, said George Tenet, the former director of the CIA, America’s intelligence system was “blinking red”. On July 13th Dan Coats, the current director of national intelligence, invoked Mr Tenet’s language to convey the magnitude of the threat posed by foreign hackers. “The digital infrastructure that serves this country is literally under attack,” he said. “The warning lights are blinking red again.” Although Mr Coats expressed concern about infiltration from numerous countries, he called Russia “the most aggressive foreign actor”. Meanwhile, the president seems indifferent when it comes to the risk of Russian meddling with the mid-terms in November. How vulnerable are American elections?

If Vladimir Putin’s hackers did seek to intervene in the congressional elections in November, they would have two avenues. One, familiar after 2016, is to use social media and pretend news sites to spread disinformation or propaganda. It seems likely



that Russian intelligence agencies will continue trying to bolster the Kremlin’s preferred candidates and hinder their rivals in the court of online public opinion. In May a Russian news agency with close ties to Mr Putin’s government launched a “news” website called USA Really, which publishes a regular stream of articles favourable to Mr Trump. The impact of such campaigns is hard to measure: recent research on their effect in 2016 found that most people reading such stuff already supported Mr Trump (see Lexington). But the races for control of both chambers of Congress now look close enough that propaganda could prove decisive, even if it only sways a tiny sliver of the electorate.

The second, more insidious, method is to complement that tactic with a more direct cyber-attack on voting records or machines. Fortunately, the spectre of hackers in Moscow doctoring actual election results appears remote. Just before leaving the White House, Barack Obama designated election systems as critical infrastructure. That decision granted election officials access to federal cyber-security experts and to an information-sharing network. The federal government has since provided billions of dollars for securing the administration of elections.

All voting machines are supposed to be “air-gapped” (not connected to the internet), making them much harder to infiltrate from afar. Attackers could try to alter voting results by loading malware onto USB sticks that get plugged into the machines, or embedding it in the code run on them (the government’s own hackers used this technique to sabotage Iran’s air-gapped nuclear centrifuges). But even if Russia did manage to sneak a virus onto some of these machines, it would need to remain hidden during routine logic and accuracy tests, conducted before the election, which ensure that the devices’ tabulated totals equal the sum of the individual votes entered on them. Rigorous reviews of software and vote tabulations have revealed no evidence of any electronic ballot-stuff- ►►

ing, deleting or switching in 2016.

Voter lists are not so well protected. Even without foul play, simple clerical errors in state and city databases of voters' names and addresses caused long delays at polling places in California in 2018 and North Carolina in 2016, for example. In Palm Beach County, Florida, similar mistakes caused 2,000 properly registered voters to be turned away in the presidential primaries of 2016. And, unlike the machines that tally up votes, the computers that house this information are connected to the internet and often lack robust defences against intrusion. In 2016 Russian hackers gained access to the state elections server in Illinois, proving they could penetrate even a fairly well-secured system.

If hackers were able to alter the recorded addresses of a few thousand voters with African-American family names, for example, they could disenfranchise these voters, whose identification documents would no longer match their listed addresses. Congressmen should spend a bit less time bloviating about Russians on Facebook and more time preventing that. ■

Male voters

Sometimes it's hard

Men are sticking with the Republicans, widening the gender gap in politics

MEN have long tended to favour Republican candidates; women have voted more for the "mommy party" than men in every election since 1992. Yet the gap now looks like a chasm. In 1992 women and men disagreed over which party they identified with by 11 points. The margin has since widened to 23 points (see chart). For comparison, Donald Trump won white voters by 21 points in 2016 and lost Hispanics by 36 points.

It is no mystery why so many women are abandoning the Republican Party. Lots of the party's elected officials have vowed to defund Planned Parenthood, which in addition to its other activities provides abortions. They often have bossy views about what kind of contraception company health plans should offer their employees. Democrats often use these examples of party policy to motivate women to vote against Republicans. "Any woman who voted against Hillary Clinton voted against their own voice," Michelle Obama said in 2017. Add in a Republican president with a taste for younger wives and pneumatic paramours—a man who, according to a biography of the first family by Emily Jane Fox, once suggested to his teenage daughter that her modelling career would

be enhanced if she had breast implants—and you have a powerful mixture.

The gender gap in American politics cannot solely be explained by what women want, however. If it could, there would not be much of a contest ahead in November's mid-terms. Instead, men are sticking with the Republicans as women move away, buttressing the party when it would otherwise be falling over.

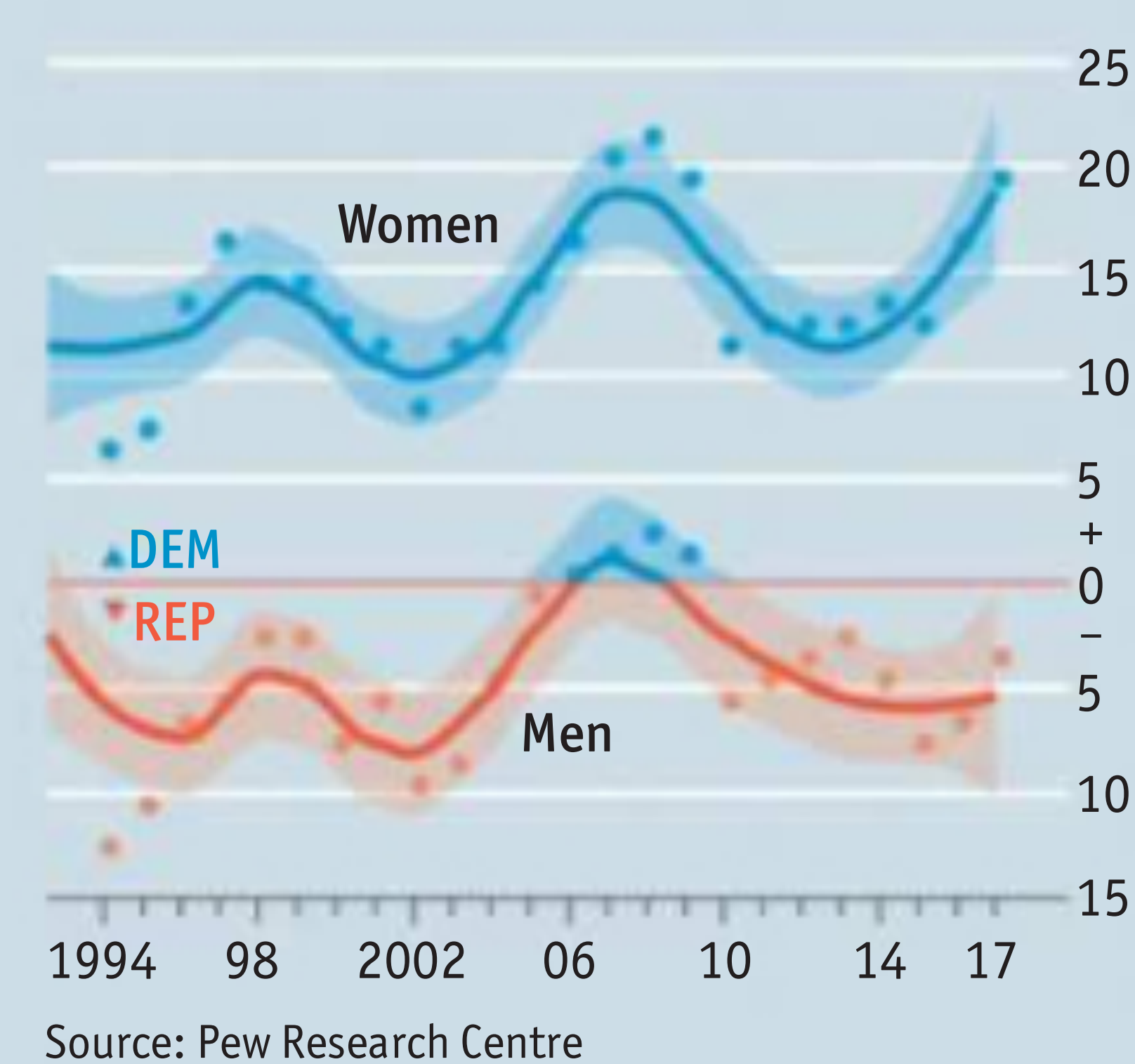
Why should this be? Political psychologists argue that men are experiencing "status threat" from women, just as many white voters feel a status threat from non-whites. The most prominent proponent of the idea that status threats motivate voting is Diana Mutz of the University of Pennsylvania. Ms Mutz argues that there was little relationship between a change in voters' financial circumstances and their support for Mr Trump in 2016. Her analysis finds that feelings about America's waning position in the world and the increased prominence of non-whites in the country were far better predictors of Trump-voting.

A different kind of status threat occurs as women climb the ranks of Fortune 500 companies and shatter glass ceilings: many men worry about cutting their feet on the shards left lying on the floor. The American National Election Studies (ANES) from 2016 found that those who think things were better when a man went out to work and a woman stayed at home were overwhelmingly more likely to vote Republican. That view, though shared by a considerable minority of women, is unsurprisingly more widespread among men. The ANES pilot study found that 40% of Republican men thought they faced "a great deal" or "a lot" of discrimination on account of their sex.

Social-science experiments have found that when men are prompted to think about changing gender roles, their political opinions shift measurably to the right. One

Stand by your clan

United States, gap in party identification
By sex, % identifying as Democrat minus Republican



test along these lines was conducted with voters in New Jersey in 2016. Half of the households in the study were simply asked whom they would vote for. The other half were told that in an increasing number of families women earn more than men, and were then asked about their voting intentions. The first group of men, who received no prompt, favoured Hillary Clinton by 16 points (New Jersey is heavily Democratic in presidential elections). By contrast, the men who received the prompt favoured Mrs Clinton by eight points.

Such attitudes might be dismissed as the grumblings of old men, but they are not. The Pew Research Centre found that the gender gap is 20 points wider among voters younger than 35 than it is among those aged 35 to 49. One explanation is that young men are more likely to encounter the women's-rights movement on social media than older men are. Or perhaps men find women more threatening before they settle down with one. Whatever the cause, with binders full of women running for the Democrats this year it is hard to see men abandoning the party of Trump. ■



Not an incel in sight

The Midwest

Nice change

MILWAUKEE, WISCONSIN

Contrary to received wisdom, much of the Midwest is flourishing

AS HE gesticulates on the rooftop terrace of the new Kimpton Hotel, Dennis Klein, a retired property developer, is visibly proud. One of his sons developed the hotel in Milwaukee's third ward, a project that attracted scepticism from local grandees, who doubted anyone wanted it. Another son developed some of the buildings that are visible below. The third ward was once a dreary part of town filled with warehouses. In 1984 it had only 28 residents, says Mr Klein. Today it has boutiques, cafés, bars and many thousands of oat milk-drinking hipsters.

The Midwest is not monolithic but rather a tale of at least two rustbelts, says John Austin of the Michigan Economic Centre, a think-tank. Bigger old industrial cities such as Minneapolis, which used to live off flour-milling, Pittsburgh, which made steel for the whole country, and Indianapolis, once home to dozens of carmakers, have turned a corner. Not long ago Milwaukee was in decline, like many old industrial cities in the rustbelt. Some of these cities are now thriving; others are sinking.

Wisconsin's biggest city was prosperous before, thanks to German brewers such as Schlitz, Pabst and Miller, a thriving tannery industry and a bustling port on the shores of Lake Michigan. Nearly half of its workforce was employed in manufacturing in the couple of decades after 1945. As African-Americans fled the South to work in its factories, Milwaukee became deeply segregated. This pattern has endured: Milwaukee came top of a recent ranking of America's most segregated cities. Unskilled workers were hit hard when, under pressure from globalisation and automation, employers downsized, moved or simply shut down.

Over the past five years, however, around 2,500 hotel rooms have been added to its downtown. Northwestern Mutual Life Insurance spent an estimated \$450m to build the Tower and Commons 32-storey skyscraper, which was completed last year and provides office space for 2,400 employees. The state of Wisconsin and the owners of the Milwaukee Bucks, the local basketball team, forked out \$250m each for a spanking new arena that will open soon. It is hard to find plumbers or carpenters in the area, as they are in such high demand. About \$5bn has been invested in downtown property in the past 15 years, says Tim Sheehy of the Metro Milwaukee Association of Commerce.

Milwaukee makes small engines, water heaters, fan blades for jet engines and generators. The share of the workforce employed in manufacturing (14%) is the second-highest of any American city, according to Milwaukee's business lobby. But there is plenty more going on, too. Northwestern Mutual, a life insurer, Kohl's, a chain of department stores, Manpower, a staffing firm, and Harley Davidson picked Milwaukee for their headquarters. The city has majestic architecture, leafy parks, a fine site at the confluence of three rivers on the shores of Lake Michigan and craft beer-fuelled summer festivals. It recently managed to bag America's largest-ever foreign investment. Incentivised by \$3bn in tax breaks and subsidies from the state, Taiwan's Foxconn, the world's biggest contract manufacturer, promised to create up to 13,000 jobs with a \$10bn investment in Racine, one of Milwaukee's suburbs.

Midwestworld

While many of the Midwest's bigger cities are thriving, tier-two cities are finding life much harder. Gary, Indiana, and Flint, Michigan are two extreme examples of former company towns that have not yet recovered from the loss of their anchor employer. Alan Berube and Cecile Murray of Brookings, a think-tank, have looked at 185 counties with a population of 50,000 or more where manufacturing once accounted for a fifth of jobs. Of the 63 such places in the Midwest, more than half have seen net job outflows since 1970. Mr Berube is pessi-

mistic about the fortunes of smaller cities. Unless they have a close connection to a bigger metropolis, are home to a first-class university or manage to find a niche, he says, they will struggle.

College towns such as Ann Arbor in Michigan, home of the University of Michigan; Champaign-Urbana, which has the University of Illinois; Iowa City (University of Iowa) and West Lafayette (Purdue University) are flourishing. Add in the bigger cities—Chicago is home to two of the world's leading universities (the University of Chicago and Northwestern), while Pittsburgh has the University of Pittsburgh and Carnegie Mellon—and the Midwest has 20 of the world's top 200 universities.

Not every town can have a prestigious university, though. Some, such as Kalamazoo, Michigan (population 75,000) and Warsaw, Indiana (population 15,000), have managed well without. Kalamazoo suffered a painful blow when Pfizer and Upjohn, two pharma giants, closed their factories, but it managed to keep some of the talented scientists and help them to start new biotech firms. To the envy of other cities, it is offering all graduates of its high schools the "Kalamazoo Promise", a free college education. This is possible only thanks to a fabulously munificent philanthropist, but it has played a big part in reversing the city's exodus of people. Warsaw found its niche as the nation's chief maker of prosthetic limbs. Jasper (population 15,000) in Indiana, a city proud of its Germanic roots in Pfaffenweiler in the foothills of the Black Forest, is doing well with advanced manufacturing industries.

As the successful parts pull away from the rest, the Midwest will become a little less midwestern. The region has long been more equal than the rest of the country: that is likely to change. It is often said to be either in decline or to be experiencing a renaissance. In fact the Midwest is doing both at the same time. ■



The sun rises in the west

Lexington | A legitimacy problem

Donald Trump's defensiveness about the effect of Russian hacking is highly revealing



AMONG the Republicans cowering before President Donald Trump, the presence of Marco Rubio and Paul Ryan has been especially disheartening. Yet both threatened to regrow spines this week. “Russia is an adversary,” declared Senator Rubio, in response to the president’s fraternising in Helsinki. “Russia is a menacing government that does not share our interests,” said the Speaker of the House of Representatives. These were, if not stinging rebukes, better than Mr Rubio’s usual habit of keeping shtum and tweeting Bible verses whenever Mr Trump does something horrid, or Mr Ryan’s of offering a wry half-smile and a comment on tax reform. Yet both men, formerly known as principled conservatives, sullied their moment of revertebration. Both claimed the Russian election-hacking effort on Mr Trump’s behalf had been a failure. “It is also clear,” said Mr Ryan, that “it didn’t have a material effect on our elections.”

Not so. The margin of Mr Trump’s victory in the electoral college was tiny, a matter of just under 80,000 voters in three rust-belt states. Any one of Hillary Clinton’s unforeseen troubles could account for that: including her late fainting fit, James Comey’s blundering or an illicit Russian social-media campaign that suggested she was in league with the devil. And a bigger Russian intervention, the cyberwar on behalf of Mr Trump described in Robert Mueller’s indictment of 12 Russian military intelligence officers, could have hurt her more than all the rest combined. It appears to have been better-resourced, longer-running and more extensive and ingenious than almost anyone imagined.

The special counsel’s indictment describes a global network of anonymous servers and bitcoin miners, rampant identity theft and money-laundering, all focused on the Russian objective of getting Mr Trump elected. The Russian spies, whose identities, responsibilities and individual activities the indictment meticulously identifies, had a free run of Mrs Clinton’s party and campaign computer files until a few weeks before the election. The indictment suggests that they may additionally have stolen the Clinton team’s voter-targeting data, which in the hands of her opponent could have been a devastating weapon.

Even if those numbers were pinched (and Mrs Clinton’s data people claim to have seen other proof to that effect), it would be impossible to know whether Russia swung the election for Mr

Trump. Yet given the extent of its effort and given that it need only have shifted 0.03% of the total number of votes from the Democrats to the Republicans, it might well have done. There is certainly no basis on which to conclude that it did not.

The Democrats’ grouching over this possible election theft will get them nowhere, of course. Yet the grouching is inevitable and a mark of Mr Putin’s indisputable achievement: a serious jolt in Americans’ confidence in the integrity of their elections. Half of Americans think that Mr Trump colluded with the Russians to engineer his election. In the court of public opinion, that arguably makes his presidency illegitimate, which would be corrosive to American democracy even under a much less divisive leader. A governing party mindful of majority sentiment, and ambitious to win it, would respond to that carefully. By treating reasonable concerns about Mr Trump’s election as just another partisan fight, Mr Ryan and his colleagues are instead underlining the extent to which they have abandoned that ambition.

Their complacency towards Mr Trump’s financial conflicts, a second source of doubt about Mr Trump’s presidency, provides another illustration of this. Among innumerable examples, China is reported to have granted trademarks to at least 39 Trump-branded products since his inauguration, including some the president had previously been denied. Mr Trump and his retinue spent almost a third of last year staying, at public expense, at Trump properties. A working weekend at one of the president’s golf courses in Scotland, during which he managed to squeeze in 18 holes in between plotting the downfall of the West, cost American taxpayers almost \$70,000. There are laws against such self-enrichment. Yet even as legal challenges to Mr Trump’s behaviour creep through the courts, the Republicans dare not criticise it. To do so might cost them an invitation to Mar-a-Lago.

It might also invite a primary challenge, given the way Mr Trump has weaponised his unpopularity, rallying his supporters against any critic. No doubt right-minded Republicans, among the many who privately abhor Mr Trump, would otherwise speak up. Yet it also seems notable that their unwillingness to do so is consistent with their party’s acceptance of a different sort of illegitimacy. That is the tyranny of minority rule, enabled by the quirks of an electoral system that gives its white, rural supporters more power for fewer votes than the more diverse, clustered Democrats—almost 3m fewer, in the case of Mr Trump’s victory over Mrs Clinton. The adoption of white identity politics represents an embrace of minoritarianism as a core strategy. That led Republicans to Mr Trump. Further compromises with democratic legitimacy have followed.

The Russia House

It is hard to see any happy end to this. The question is to whom the unhappiness might befall: the Republicans or America. In one scenario, which might take an election cycle or two, the Democrats’ superior numbers will eventually prevail, and the minoritarians will be overwhelmed by the aggrieved majority. In the other, the Republicans’ continued disdain for the majority, even as they cling to power, will cause an explosion. Perhaps the likeliest spark for that would be if Mr Putin is again suspected of fixing an election on their behalf. So it is also notable that, despite their brief flash of pique with the president this week, Republican congressmen such as Mr Ryan and Mr Rubio have not yet done anything to make that less likely. Until they do, every American election will come with a risk attached. ■



Unrest in Haiti

A gamble gone wrong

PORT-AU-PRINCE

A promising president runs into the obstacles that bedevilled his predecessors

OF ALL the bets placed on the football World Cup, the biggest gamble took place in the Caribbean. Lacking a competitive side, many football-mad Haitians have adopted Brazil as their team—some because they share African roots with Pelé, Brazil's greatest player ever, others because Brazil has given Haiti financial and military aid. With the public glued to their screens watching the *seleção* on July 6th, the Haitian government discreetly raised fuel prices by around 40%.

A Brazilian victory might have left Haitians too ecstatic to protest. Instead, Brazil fell to Belgium. Soon after, Port-au-Prince burst into flames. Protesters burned cars, looted shops and closed much of the country with roadblocks. Jack Guy Lafontant, the prime minister, quickly reversed the policy, but could not save his job; he resigned ahead of a no-confidence vote on July 14th. Early estimates put the damage at some 2% of GDP. Three people have died.

Latin American nations far sturdier than Haiti have been brought to a standstill by protests over fuel prices. But in the poorest and most unequal country in the Americas, the unrest is particularly acute. Haiti is still rebuilding itself after an earthquake in 2010 that killed perhaps 200,000 people. And as the flow of aid from foreign donors has ebbed, so too have funds from Venezuela, which sent Haiti \$300m a year until it plunged into an economic crisis.

Jovenel Moïse, the president, took office

last year shortly after another disaster, Hurricane Matthew. Mr Moïse grew up in Haiti's poorest region, and ran a banana plantation until 2015. The presidency is his first elected office. Upon coming to power, he combined unrealistic promises, such as providing uninterrupted electricity to every household, with "shovel-ready" initiatives like building roads and canals in the countryside. But the endemic weakness of the state may prevent him from achieving his goals great and small.

The wealth of Haitians

One of Mr Moïse's first moves was to strike a deal with the IMF, which required Haiti to wean itself off the fuel subsidies that consume over a tenth of public spending. In 2011 the government stopped pegging domestic prices to global oil markets, leaving it to foot the bill for any rising costs; crude has appreciated by 50% during the past year. Some 85% of the subsidies go to the richest 10% of Haitians, who tend to own cars. Wilson Laleau, the president's chief of staff, says that 6,000 barrels a day are smuggled to the neighbouring Dominican Republic. Ditching subsidies would free \$350m a year badly needed elsewhere: Haiti spends just 5% of GDP on health, education and social protection. Honduras and Nicaragua, the two poorest countries in mainland Latin America, spend 15% and 10% respectively.

Helping the poor by abolishing a prac-

Also in this section

25 Lula and Brazil's courts

25 Paraguay-Taiwan relations

26 Bello: Mexico's misshapen economy

tice that benefits the rich should be an easy sell. But by its own admission, the government botched its pitch. It announced the price increase but did not mention its countervailing policies, such as compensation for the poor and working class, and spending the savings on social services.

Even a better-handled rollout might not have prevented lawlessness, given the weakness of Haiti's security forces. UN peacekeepers, who had patrolled the country since 2004, withdrew last October. The foreign troops were not popular. Some forced children into sex in exchange for food and medicine; others brought cholera, causing an epidemic that killed 10,000 people. Nonetheless, they kept the peace and buoyed the economy by filling cafés and restaurants. In their absence, it fell to the underpaid police force to impose order (Haiti's army was abolished in 1995). Its inability to control the riot raises doubts about how it will handle future unrest.

Some government officials wonder whether anyone organised the protests—possibly fuel smugglers, political rivals or powerful families that benefit from the subsidies. Many of the roadblocks and stacks of burning tyres were in place within minutes of the end of the football match. Even if the uprising was spontaneous, however, it makes clear that the president will struggle to implement his agenda.

Mr Moïse's "Shaved-Head Party"—so called because both he and his predecessor sport the party's look—was founded only in 2012, and has built little political infrastructure. Before trying to restore the subsidy cuts, savings from which are already counted in the budget, Mr Moïse will need to win approval for a new prime minister—Haiti's 21st since 1988.

And the government is too poor for the president to buy popular support. Just 70,000 tax returns are filed each year in a ►►

▶ country of 11m people. Foreign donors often prefer to supply their aid through NGOs, rather than see a portion lost to corruption. This prevents the state from strengthening its capacities.

Without money or patronage, Mr Moïse must rely on personal popularity. Although he won the election of 2016 easily, turnout was around 20%. He has sought to drum up support by holding rallies around the country under the “Caravan for Change” banner, promoting the government’s good works. Unfortunately, the fuel-price fiasco has set back these efforts.

Near the presidential palace, three men chat on a park bench. Patrice Ciresmond, a 48-year-old who cannot find work, sat in the same spot to watch the ill-fated World Cup game on a government-provided screen. “They were waiting for when we were about to be happy because of Brazil, and then they put the knife in our belly,” he says, as his friends nod along. “They don’t want us to laugh even just once.” ■

Law and politics in Brazil

Lula, livre?

SÃO PAULO

Contradictory court rulings on freeing the once (and perhaps future) president

WHEN Luiz Inácio Lula da Silva finished his stint as Brazil’s president in 2011, his approval rating was 83%. His social programmes and a commodity boom helped lift 30m people out of poverty. He hopes to run for president once again in an election this October, and leads the polls by a healthy margin. Only one obstacle seems to separate him from a third term: he is serving a 12-year prison sentence for corruption. He spends his days listening to samba and watching television in his cell.

Until this month, political observers



Paraguay and Taiwan

The blossom and the passion flower

ASUNCIÓN

As others change allegiance, a long-distance relationship endures

NO PLACE on Earth is farther from Paraguay than Taiwan, its antipode. Yet Asunción, Paraguay’s steamy capital in the heart of South America, is full of symbols of friendship with an Asian island 20,000 km (12,400 miles) away.

In a leafy suburb looms a weathered statue of Chiang Kai-shek, who ran a Chinese government-in-exile in Taiwan until 1975. Not far away is the futuristic home of the Paraguayan Congress, built using Taiwanese funds in 2003. Just nearby is a replica of the Taipei 101 skyscraper. Unveiled in 2017 to mark 60 years of diplomatic ties, it is entwined with the national flowers of Taiwan (plum blossoms) and Paraguay (passion flowers).

United at first by anti-communist fervour, the two maintained a bond long past the end of the cold war. Today Taiwan sends Paraguay money, police vehicles and soap operas dubbed into Spanish, and trains students and army officers. Paraguay reciprocates with commodities, foodstuffs and diplomatic support.

The Chinese government in Beijing has long lobbied foreign counterparts to stop recognising Taiwan. In 1990, 28 countries considered Taiwan to be China’s government, compared with 139 recognising the People’s Republic. Today’s figures are 18 and 177. São Tomé and Príncipe, Panama, the Dominican Republic and Burkina Faso have all switched to

mainland China since late 2016. Of the 18 countries still in Taiwan’s camp, ten are in Latin America. But China’s development banks lent \$150bn to the region from 2005 to 2017, a sum Taiwan cannot match.

Taiwan has reason to fear that its lone South American ally may be next. Mario Abdo Benítez, Paraguay’s president-elect, hopes to sign a trade deal with China via Mercosur, a trade bloc. According to an adviser, he wants to open a trade-and-investment office in Beijing without granting recognition. As one minister has acknowledged, Paraguay already exports goods to China indirectly—mainly soya-beans sold onwards from Uruguay.

But Taiwan is unflustered, says Diego Chou, its ambassador to Paraguay. Non-recognition is no barrier to trade with the People’s Republic, he notes: China is Taiwan’s principal trade partner. Last year Paraguay and Taiwan signed a deal scrapping tariffs on 54 Paraguayan products. Taiwan’s aid has paid for 4,500 units of social housing. In April the two countries announced the founding of a technological university in Paraguay. And Mr Abdo Benítez’s pick for foreign minister, Luis Castiglioni, is a known Taiwanophile who visits often.

“We’re not a superpower,” Mr Chou recognises. “But we’ve always been at Paraguay’s side.” For now, at least, Paraguay’s leaders still feel the same way.

mostly dismissed Lula’s chances of making a comeback. Formally, he has until August 15th to register to stand, which would trigger a review of his eligibility by the electoral tribunal. However, Brazil’s *ficha limpa* (“clean record”) law bars candidates whose convictions have been upheld by an appeals court, as Lula’s was in January. His only hope is for the supreme court to overturn the verdict. Some polling firms have already dropped him from their questionnaires, leaving the far-right Jair Bolsonaro as the front-runner. On July 8th, however, a judge decreed that Lula should be freed, plunging the campaign into turmoil.

The saga started when three congressmen from Lula’s Workers’ Party (PT) filed a habeas-corpus petition demanding his release. Although scores of similar requests had already been filed, the lawmakers timed theirs to fall into the hands of Rogério Favreto, an appeals judge on call over the weekend. Mr Favreto had previously been a member of the PT and worked for Lula’s government. He instructed police to let Lula go, saying that another judge had

violated Lula’s rights by banning him from giving interviews while behind bars.

Mr Favreto’s decision was not implemented. In response to his directive, two off-duty judges issued orders negating it. A third, the president of Mr Favreto’s tribunal, settled the score, ordering that Lula remain locked up. Nonetheless, the contradictory rulings put Lula back at the centre of the campaign. Google searches for his name spiked 50-fold on July 8th. That increases the risk that Brazilians will regard the election as illegitimate if Lula cannot run. The chaos in the courts also reinforces concerns that the judiciary is becoming just another forum for partisan politics.

Many Brazilians cheered when Lula was first convicted last year. Despite his popularity, the verdict was widely seen as a victory over impunity after decades when the powerful were rarely held to account. Lula is being held in the same police building where Sérgio Moro, one of the magistrates who intervened to keep him in jail, launched the *Lava Jato* (“Car Wash”) investigation in 2014, unveiling a huge cor- ▶▶

► ruption scheme involving politicians and businessmen of all political stripes.

Nonetheless, PT loyalists counter that the judiciary is treating Lula unfairly. He was convicted of accepting a seaside flat worth 2.2m reais (\$690,000) from a construction firm and, in return, of encouraging the state oil company to award contracts to that business. Lula swears he is innocent, and that he never owned the flat. In a country where only the supreme court, backlogged with 87,000 cases a year, can hear criminal cases against sitting office-holders—enabling many politicians accused of massive graft to walk free—

Lula's 12-year sentence looks harsh. "We believe the Car Wash operation is political persecution against Lula," says Valeska Teixeira Zanin Martins, one of his lawyers.

Lula's supporters also argue that his punishment has exceeded his sentence. In 2016 the supreme court ruled that people convicted of crimes could be jailed after losing an appeal, but did not state whether they retain political rights such as voting and running for office. Another part of the constitution protects these rights, though whether they include giving interviews is up for debate. The judge overseeing Lula's sentence prohibited interviews, citing the

terms of Lula's imprisonment and his probable ineligibility for office. Mr Favreto, in contrast, tried to free Lula on the grounds that his incarceration itself violated his political rights as a potential candidate.

Even if Lula is not on the ballot, the PT is counting on these arguments to bolster its support. If enough voters believe Lula has been wronged, they may be more likely to plump for whomever he endorses. In a contest between the authoritarian Mr Bolsonaro and a PT candidate propped up by outrage over anti-corruption efforts, Brazil's fragile democratic institutions would be the only certain loser. ■

Bello | A misshapen economy

Why Mexico has not become more prosperous—and how it could

ONE of the main reasons for the landslide victory of Andrés Manuel López Obrador, a left-winger, in this month's presidential election in Mexico was the country's mediocre economy. Between 1995 and 2015 real GDP per person increased by an annual average of 1.2%, less than in any Latin American country except Venezuela (see chart). Take into account the swelling labour force, and Mexico looks even worse: GDP per worker expanded by just 0.4% a year, while total factor productivity (a measure of the economy's efficiency) barely grew. What makes this puzzling is that Mexico has embraced economic orthodoxy: sound monetary and fiscal policy, open trade, investment in education and, more recently, improved competition policy.

So what went wrong? In a groundbreaking book* Santiago Levy, the outgoing policy chief at the Inter-American Development Bank, argues that Mexico's decision-makers have failed to fix distortions in the economy caused by the tax regime, social policy and legal institutions, and in some cases have compounded them. These distortions lead to a systematic misallocation of resources, says Mr Levy, a former deputy finance minister and head of the social-security institute.

In other words, workers end up in jobs where they are less productive than they might be. Too many individuals who should be workers become entrepreneurs or are self-employed. Efficient businesses are taxed and penalised, while subsidies help sustain unproductive ones. Joseph Schumpeter's notion of "creative destruction", in which capitalist competition drives out weaker firms and rewards stronger ones, is paralleled in Mexico by "destructive creation", quips Mr Levy, in which the environment favours the entry and survival of weak businesses that hin-



der the growth of stronger ones.

Mr Levy's powerful argument is based on hard data. He has had access to detailed economic censuses conducted every five years by Mexico's statistics institute. They show that Mexico has a huge and disproportionate number of small businesses, and unusually wide variation in the productivity of its companies. The census under-counts small firms because it excludes those that lack fixed premises (such as taco stands) and those in villages of fewer than 2,500 people. Even so, more than 90% of the 4.1m firms in the 2013 census had at most five workers. And 90% of the total were "informal", absorbing almost 33% of the capital stock and 40% of workers.

Rather than "informality", the key distinction Mr Levy makes is between firms that have salaried employees and those that do not. Four-fifths of the "informal" firms are in the second category: their staff are either self-employed or paid piece-rates or profit shares. These firms' only legal obligation is to pay corporate tax, of just 2% of revenues if these are under 2m pesos (\$105,000) a year. Firms with salaried workers, by contrast, must pay social insur-

ance, deduct income tax and grapple with employment law (which doesn't allow them to fire people if business drops).

The census shows that firms with salaried workers are much more productive. So it is worrying that from 1998 to 2013 the weight of non-salaried firms in the economy grew. Mr Levy argues that public policies are to blame. In the name of social inclusion, in the period under study, Mexico introduced non-contributory pension and health benefits worth 1.3% of GDP, thereby helping non-salaried workers, while raising income taxes on salaried ones to the tune of 1.9% of GDP. Never strong, the rule of law and enforcement of contracts have become even weaker.

Mr Levy, who designed Mexico's conditional cash-transfer scheme aimed at reducing poverty, has long argued against erecting further non-contributory benefits in parallel with (rather than to replace) employment-based social insurance, because this discourages hiring salaried workers. His book broadens that argument. He thinks that Mexico also needs to replace restrictions on firing with unemployment insurance and shift the tax burden away from payrolls, abolish tax perks for small firms and take contract enforcement more seriously. The prize would be faster growth, better social provision and better-paid jobs.

This ought to be attractive to a left-winger like Mr López Obrador. The policy changes are politically daunting, but the new president has a strong mandate. Unfortunately, he seems wedded simply to expanding non-contributory pensions and other benefits. It would be ironic if a politician who claims to be a mould-breaker offers more of the same.

(*) Under-Rewarded Efforts: The Elusive Quest for Prosperity in Mexico, IDB.



Pakistan's general election

Military machinations

ISLAMABAD

Election-rigging and violence overshadow an election that could put Imran Khan, a former cricket star, in charge of the country

“FOR the first time in our history, fair elections are going to be held,” insisted Fawad Chaudhry, a spokesman for the opposition Pakistan Tehreek-e-Insaf (PTI) party, this week. Unfortunately, this view is not universally held. The national and state elections on July 25th, in which 100m people are registered to vote, should mark a further stage in the country's progress towards democracy, for the transfer of power thereafter will be only the second from one civilian government to another in the country's seven decades of coup-studded history. But the poll takes place amid accusations that the powerful military establishment is tilting the field in favour of the PTI and its leader, a former cricket star, Imran Khan (pictured, on the flag).

There is another dark cloud over the campaign: violence. On July 13th a suicide bomber, alleged to have links with Islamic State, killed 149 people in an attack on a rally in Mastung, a town in the south-western province of Balochistan. It was the country's second-deadliest terrorist incident and a reminder that, despite a steep fall in the number of terrorist incidents in recent years, the menace remains.

The bloodshed occurred on the day that the former prime minister, Nawaz Sharif, flew from Britain to Pakistan to begin serving a ten-year prison term for corruption—a punishment that his supporters allege was orchestrated by the army. Reflecting the poisonous mood of the campaign, Mr Khan insinuated that Mr Sharif's party,

the ruling Pakistan Muslim League-Nawaz (PML-N), was somehow responsible for the bloodshed in Mastung. “Beginning to wonder why whenever Nawaz Sharif is in trouble, there is increasing tension along Pakistan's borders and a rise in terrorist attacks. Is it a mere coincidence?” Mr Khan asked in a tweet.

Mr Khan's party has at least an even chance of winning, and he, at the age of 65, of becoming prime minister. What a change from the years leading up to the election in 2013, when the PTI had only one seat in parliament (Mr Khan's own). Since then his promise of a *naya* (new), corruption-free Pakistan has enthralled young and middle-class voters. In 2013, in a poll deemed fair by international observers, the PTI took 34 seats in the 342-seat legislature, breaking the duopoly of the Pakistan Peoples Party (PPP), then in power, and the PML-N. Mr Khan is credited with boosting turnout to a 30-year high of 55%.

How close he is to the generals is hard to gauge. Many Pakistanis still praise the “Charter for Democracy”, signed in 2006 by the PPP and PML-N, which appeared to put an end to years of competition between the two parties for the army's favour. The document pledges that “no party shall solicit support of the military to come into power”. Mr Khan, however, declared it a sham. Within a year of the election in 2013, he was leading protests against the victorious PML-N, accusing it of having rigged the vote. Now the PML-N accuses Mr

Khan of having played into the army's hands with his successful request for the Supreme Court to disqualify Mr Sharif as prime minister because of his undeclared assets in London (it did so a year ago). The army had been chafing at Mr Sharif's attempts to assert civilian supremacy.

The party's spin

The PTI's strategy in this election campaign is similar to the one it adopted five years ago. It emphasises Mr Khan's celebrity as the “captain” who brought home the Cricket World Cup of 1992, as well as talking up his philanthropy. Mr Khan has established three world-class cancer hospitals in Pakistan. In addition, the PTI promises to secure the return from abroad of \$2.3bn that Mr Khan claims was looted by the Sharif family from public coffers.

The Oxford-educated ex-cricketer's tirades against corruption enjoy much appeal among educated, well-heeled Pakistanis. But Umair Javed, a columnist, says that Mr Khan's attempts at populism are “just not popular enough” among those who are less well off. Ali Cheema, an academic, says his studies have found that ordinary Pakistanis are more interested in the economy, employment and public services than in Mr Khan's anti-corruption platform. In these areas, the PML-N enjoys a good record. It has fulfilled its manifesto pledge to end electricity shortages. Its splurge of spending on infrastructure is popular (Mr Khan's accusations that the ►►

Also in this section

28 An identity crisis on the Cook Islands

29 LGBT rights in Singapore

30 Banyan: The return of Eurasia

► PML-N has built too much fall flat). Since 2013 Mr Khan's party has ruled effectively in the northern province of Khyber Pakhtunkhwa. But its success there may not be sufficient to persuade many voters to desert the PML-N in the national polls.

So the PTI has focused on persuading PML-N legislators to switch sides and bring their voters with them. Mr Khan says that without "electables", as such weathervane politicians are known, "you cannot contest the election". Around a third of the PTI's candidates are recent entrants from other parties. They have been wooed with little regard to their backgrounds. Some are precisely the kind of sleazy politician that Mr Khan has railed against. Opinion polls suggest the PTI is neck-and-neck with the PML-N, says Haris Gazdar, an academic. But the rush of strong candidates to the PTI may suggest that the political elite is putting its money on Mr Khan.

One reason for the defections may be pressure from the army. Several PML-N politicians have publicly claimed in recent weeks that they were pushed by Inter-Services Intelligence, an army-dominated agency, to change their affiliation. Mr Khan denies that the army is supporting him, but says it is the "only institution" that functions in Pakistan. Some of his supporters believe the army is influential. It is playing "a big role" in the election, says Zeeshan Haider, a PTI activist. "They will decide what set-up to bring in Pakistan." The army denies all such allegations.

By returning to serve a sentence that he attributes to an army conspiracy, Mr Sharif has tried to persuade voters that the election is a choice between democracy (supposedly represented by his party) and military rule with the PTI as its front. On board Etihad Flight 243 to Lahore, the capital of Punjab province and his home town, he told *The Economist* that his battle with the "establishment"—the army, in other words—was "heading to its peak". The authorities certainly fear as much. As Mr Sharif prepared to head home, almost 300 PML-N activists were detained to prevent them stirring up trouble. Around 10,000 policemen were deployed to block a procession led by his brother, Shahbaz, a former chief minister of Punjab, from reaching the airport. There Nawaz was transferred to another flight that took him to a prison near Islamabad. Shahbaz has since tried to mollify the army. In an interview with the *Financial Times*, he vowed to consult the army, when needed, should the PML-N win.

Fears that these elections may not be fair are justified. The work of a 100-strong EU monitoring team has been mysteriously obstructed. For the first time in four elections, the EU observers were able to start their work only a week before the vote. Previously they had started more than a month in advance. The army has also been

more visible this time. In 2013, when terrorism was a bigger problem, it deployed 70,000 soldiers to polling stations. There will be 370,000 of them on July 25th. The Election Commission of Pakistan, which oversees the vote, has granted army officers the power of magistrates. This will give them control over proceedings in polling stations. The Human Rights Commission of Pakistan, a respected NGO, complained recently of "unabashed attempts to manipulate the outcome" of the vote.

If there is a hung parliament, which is likely, the PTI may be able to form a govern-

ment with the support of smaller religious parties and independent legislators. The party may even have to approach its old foe, the PPP, which these days has little support outside the southern province of Sindh. That would require Mr Khan to swallow his words about not joining hands with the PPP's chairman, Asif Ali Zardari. He has accused Mr Zardari, who was president between 2008 and 2013, of corruption. But the two parties did team up against the PML-N in senate elections in March. Mr Khan has proved flexible in his pursuit of power. ■

The Cook Islands

A curse in disguise

The island state could soon become the world's newest developed country. For its leaders, that may not be all good news

MOST political leaders play up their country's economic performance. Those on the Cook Islands, a collection of 15 islets spread over 2m square kilometres in the South Pacific, are doing the opposite.

At issue is whether the country of 17,000 people has become wealthy enough to warrant a reassignment by the OECD, a club of mostly rich countries, from upper middle-income to high-income status. The rub is that "graduation" would make it more difficult for the country to claim it qualifies for aid. This amounted to NZ\$33m (\$22m) in 2016, or just under 8% of the islands' GDP. However, New Zealand, the biggest donor country to date, has said it will continue to give an unspecified amount of financial assistance if the Cook

Islands graduates.

Henry Puna, the prime minister, has acknowledged that achieving high-income status would be a source of national pride. It would be a first for a Pacific-island state. But he has warned that "premature graduation could have serious implications" for his country. The finance ministry downplays the islands' impressive average annual growth of around 5% between 2014 and 2016. It noted in a recent press release that "economic growth may not have been as strong as we thought".

The OECD sorts countries into groups based on their gross national income (GNI) per person. Countries that exceed the high-income threshold, as defined by the World Bank, for three consecutive years are promoted to the list of developed countries. (In 2016 the high-income threshold was \$12,236.) The Cook Islands, however, does not produce data for GNI, only for GDP, which does not include net income from abroad. So when the OECD hinted last year that the islands appeared ready for graduation, officials resisted, arguing that they should be granted extra time to compile their own GNI statistics. The OECD set a deadline of early 2019.

The Cook Islands has good reason to worry that the good times may not last. It has lost 12% of its population in the past 12 years, as young people seek greener pastures in New Zealand. (Cook Islanders hold New Zealand citizenship, thanks to their country's "free association" arrangement with the former colonial master.) Spending by tourists accounts for over 60% of the islands' economy. Around 80% of the visitors (161,000 of them last year) are from New Zealand and Australia. A recession in one of those countries, or a natural disaster at home, would be an enormous ►►



How not to blow your own trumpet

► economic blow to the Cook Islands.

Further complicating matters, the Cook Islands, after suffering the effects of profligacy in the mid-1990s, has since imposed on itself some of the world's toughest fiscal constraints. These state that public debt be kept under 35% of GDP even as tax revenue is capped at 25% of GDP. Yet tax revenue is projected to breach the ceiling this year, and the debt-to-GDP ratio is inching closer to the upper bound. So raising taxes or issuing bonds are unlikely to be realistic alternatives if foreign aid is cut.

Given these challenges, and the reliance of the OECD on countries' own calculations of their GNI, Cook Islands officials may want to cook the books to avoid crossing the high-income threshold. But Mark Brown, the finance minister, dismisses this possibility. He says that massaging the GNI data "would not be acceptable to the OECD, nor do we believe that it would be in the best interests of the Cook Islands," he says.

Mr Brown concedes, however, that "a more gradual timeline, of say the early 2020s", would be preferable for joining the ranks of the rich. That would allow more time for the economy to achieve "self-sufficiency". One bright spot is the country's vast seabed mineral deposits. The Cook Islands is reckoned to have up to a sixth of the world's reserves of cobalt, an element used in batteries and jet engines. But large-scale mining is still a long way off. Well before then the OECD will have made a decision. According to an OECD spokesperson, if a country "meets the criteria for graduation, it cannot refuse graduation." ■

LGBT rights

More pink, less blush

SINGAPORE

Attitudes to homosexuality in Singapore are shifting. Policies are not

BLACK-and-white photographs in the foyer of an arts cinema are filled with smiling, pouting and laughing faces—young and old, of various races. The portraits are of members of Singapore's lesbian, gay, bisexual and transgender (LGBT) community. The fact that those pictured are willing to be identified publicly, in such a conservative country, is part of what makes the display striking. A grandson of Lee Kuan Yew, the country's modern founder, is among them, as is a Paralympian medallist and a policewoman. Leslie Kee, a Singaporean photographer who lives in Japan, took the 150-odd pictures for the exhibition, called "Out in Singapore". It is one event of many which comprise a festival linked to Pink Dot, a rally on July 21st which



Out and proud in Singapore

thousands are expected to attend.

Pink Dot has been held annually since 2009. It is the city-state's version of a pride celebration and is tightly regulated (participants in last year's event are pictured). Foreigners are banned from attending. Organisers must spend heavily on barricades and guards to meet the government's security requirements, which were tightened two years ago. Foreign firms such as Google and Barclays are no longer allowed to sponsor it. About 100 local companies have offered to back this year's Pink Dot, down from 120 last year. But this is the first year that involves a cultural festival, with talks, film screenings and even a job fair in the build-up to the rally. Activists say it is creating enormous excitement. More than twice as many people applied to have their pictures taken as were needed for the photography display, says Alan Seah, an advertising executive involved in organising both the exhibition and the Pink Dot rally. "Ten years ago it would have been a lot harder for people to come forward."

Among the portraits is one of Mr Seah and Laurindo Garcia, whom he plans to marry in Australia later this year. Their union will not be officially recognised in Singapore. Under section 377(A) of the country's penal code—introduced in the 1930s by British colonial administrators—a man convicted of committing "any act of gross indecency" (ie, sex) with another man is liable to two years in prison.

In practice, the law is not actively enforced. But its existence helps to explain entrenched discrimination in Singapore. For example, the Registrar of Societies refuses registration of LGBT groups (including a homeless shelter for transgender people). Mainstream media shun positive portrayals of LGBT folk. There is no legislation to prevent discrimination against them at

work. Same-sex couples find it difficult to gain access to public housing. Their children are deemed illegitimate, which means they are not entitled to welfare benefits. An "unwritten policy" bars gay couples from adopting children in Singapore. Treatments purporting to turn people straight are legal.

The government tries to balance the demands of rainbow activists on the one hand, and of mainly Christian and Islamic conservative groups on the other. Its vague statements muddle matters still further. When asked about his own views on section 377(A) last year, Lee Hsien Loong, the prime minister, was typically non-committal. He said his view involved an "uneasy compromise" that he was prepared to live with "until social attitudes change". Polling on the issue is infrequent, but a survey conducted five years ago found that 53% of Singaporeans "accept gay lifestyles" but that 55% reject same-sex marriage. Younger Singaporeans tend to be more understanding than their elders. In America, where same-sex marriage has been legal since 2015, polls suggest 62% of adults approve of it. In Britain, where it has been permitted since 2014, support is even higher.

Singapore's competitive instincts may help to change attitudes. Its status as a financial centre depends on its ability to attract big banks and other large international companies. Talented LGBT employees of such firms, especially those who are married, are put off by Singapore's strictures. Hong Kong, Singapore's rival as a financial hub, is more appealing. This month, after years of legal battling, its highest court ordered immigration officials to award spousal visas to same-sex expatriate couples. Singaporean companies are becoming a little bolder on the issue too. Old Chang Kee, a Singaporean street-food chain, dared to support London's pride event this year. And Poh Heng Jewellery, a local brand, received praise recently for using a gay couple in its shopfront advertising.

Despite Singapore's illiberal reputation, its LGBT community has a vibrant history. Becca D'Bus, a local drag performer, points out that for decades Bugis Street, a busy shopping area, was famous for the artistry of its drag shows. That came to an end in the 1980s after a government clampdown. But Ms D'Bus's comedy and wild outfits—sometimes involving netting, spandex and wigs made of luminous plastic tubing—attract huge audiences at festivals and film nights. She also appears at events such as Pink Dot and other, more private, gatherings. Ms D'Bus says, however, that many young drag performers in Singapore still cannot imagine telling their families what they do. Her advice to them on coming out suggests the hazards they face. "If it's not safe for you, don't do it," she says. "If you're going to lose a roof over your head, or not have food to eat, don't do it." ■

Banyan | Only connect

The idea of Eurasia is once again the subject of geopolitics. What to make of it?



OH, EAST is East, and West is West, and never the twain shall meet. Perhaps that was true when an Iron Curtain ran down the middle of Europe, and Mao Zedong's China had turned disastrously inward. But now? This week leaders of the European Union and China met at a summit in Beijing to praise "EU-China connectivity". It is more than an empty phrase, even if European leaders, distracted by political and migrant crises at home, are less clear-sighted about its implications than are their Chinese counterparts. China has hugely ambitious plans to connect the commercial worlds of Europe and East Asia via infrastructure links that will knit the vast—and till now seemingly inchoate—land mass of Eurasia together. But Chinese efforts are only the most notable of many modernising impulses that are beginning to mesh Eurasia into something resembling a whole.

In a stack of recent books and papers, a growing number of strategists argue that the emergence of a cohering Eurasia is the key feature of a new world order that is taking shape. In truth, Eurasia never went away. Nor are musings on its significance especially new. Over a century ago Halford Mackinder, a founding father of geopolitics, placed Eurasia at the centre of world affairs. In his so-called "heartland theory", he reasoned that whoever controlled the geographic core of Eurasia could rule the world.

The most original case for Eurasia having new meaning is made by Robert Kaplan in his new book, "The Return of Marco Polo's World". Mr Kaplan, an American journalist and strategist, has a long fascination with how geography shapes destiny. He argues that Eurasia's new connectivity in roads, railways, gas pipelines and fibre-optic cables means that the old regional categorisations of, say, Central, East and South Asia have ever less meaning as geopolitical concepts. The primacy of nation-states in those regions is also fading. Rather, the interplay of globalisation, technology and geography is leading "the Eurasian supercontinent to become...one fluid and comprehensible unit. Eurasia simply has meaning in the way that it didn't used to."

So far, so relatively uncontentious. But Mr Kaplan draws a couple of striking conclusions. First, he argues that, in a land mass historically dominated by China, Russia, Persia (modern-day Iran) and Turkey, a half-hidden tradition of empire is striking back. Nowhere is that more evident than with China and its Belt and Road

Initiative, which uses infrastructure as a weapon for neocolonial domination. But other historical empires are attempting to make themselves felt too—think of Russia with its Eurasian Economic Union. These new empires don't call themselves such. But they act with an imperial mindset.

It is a world that Marco Polo, who travelled from Europe to Mongol-ruled China in the 13th century, would recognise—as Mr Kaplan's title implies. China's grand strategy today acknowledges that trade is a better weapon than the sword—just like the *Pax Mongolica* that then held sway across multicultural Eurasia.

Now, as then, risks live side by side with the potential for wealth creation. Connectivity, Mr Kaplan says, "has wrought a more claustrophobic and ferociously contested world." The communications revolution denies empires an unambiguous upper hand. At one level, it allows sovereignties to multiply, as city-states thrive—think of Singapore or Dubai, like Bukhara in Marco Polo's day. And identities hew not only to empire, but to locality, religion and clan. There is a dark side to this. Islamist mayhem in Afghanistan and Pakistan, as well as the hounding of Rohingyas in Myanmar, attest to it. When globalisation weakens religion and culture, these get reinvented "in more severe, monochromatic and ideological form"—not so much the clash of civilisations as the clash of artificially reconstructed ones.

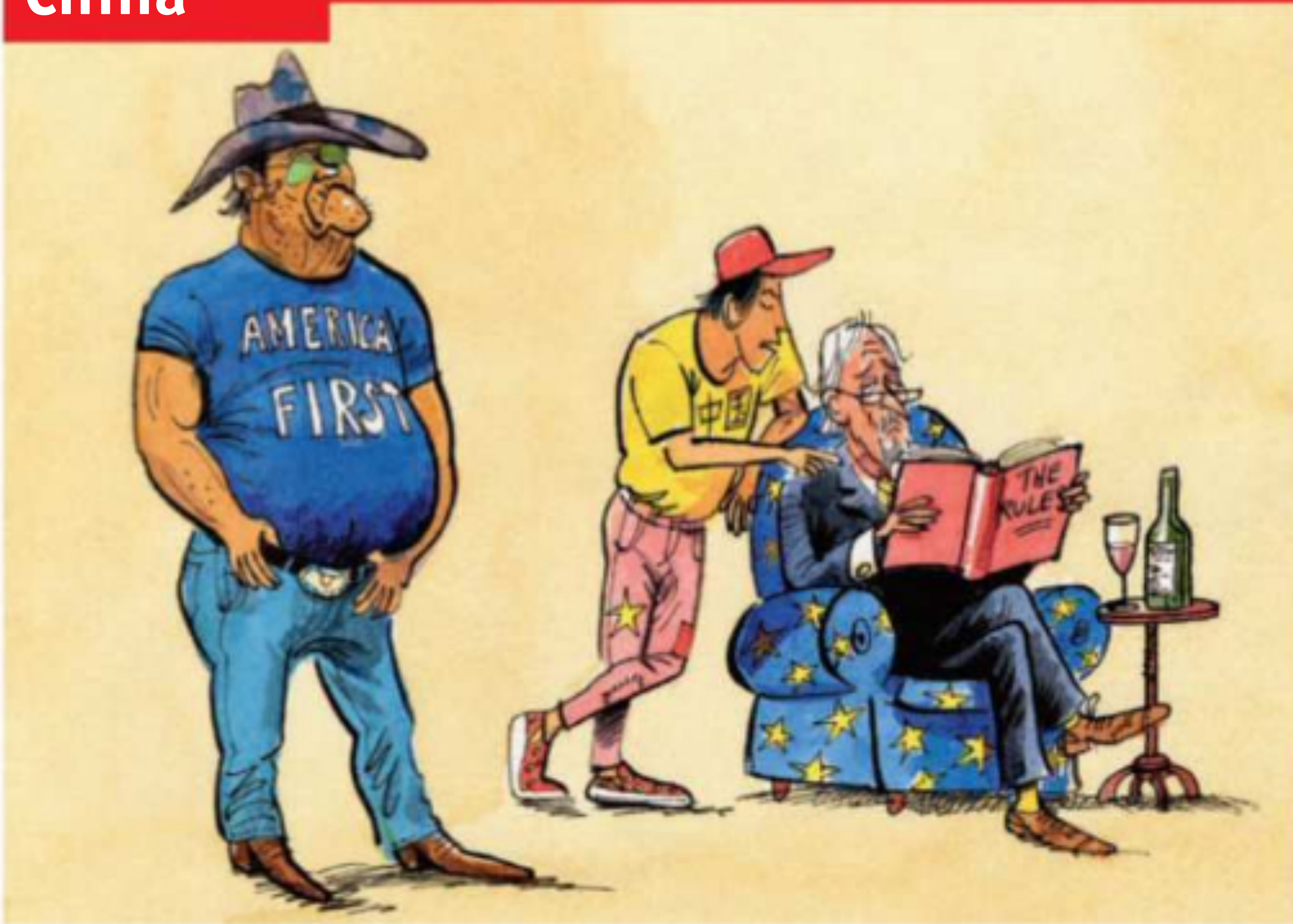
Eurasia, Mr Kaplan argues, will prove a curious mix of connectivity and anarchy. The Chinese and Russian empires are themselves vulnerable to groups empowered by communications. Crises in the capital could lead to "ungovernability in the far-flung provinces." Meanwhile, China's belt-and-road strategy could cause trouble at home. It is intended to make what Mr Kaplan calls "an end run" around China's restive western province of Xinjiang. There, modernity has forced the Muslim Uighurs into economic competition with incoming Han Chinese in ways that threaten the survival of the Uighurs' identity. It has led to Uighur radicalisation. The Chinese response to it has been to run Xinjiang as a police state of utmost brutality. It is hard to square that with the open ideals of China's plans for intercontinental links.

A new medievalism?

Such ideals may be tested elsewhere, too. China's \$46bn investment in roads, railways and a port to connect its heartlands to the Indian Ocean through Pakistan could generate enough local growth to calm the long-running insurgencies along Pakistan's frontiers. Done wrong, it could pour fuel on Pakistani fires, leaving Chinese plans in ruins.

Mr Kaplan's book depicts a new medievalism—a world in which empires, not nation-states hold, sway, and where local identities and grievances breed instability and unrest. But it is possible to base judgment of Eurasia's future too closely on the crescent of war, strife and police-state thuggery that runs from the Middle East through to western China. And, as Parag Khanna of the Lee Kuan Yew School of Public Policy in Singapore points out, the leaders of Eurasia's three most populous democracies, India, Indonesia and the Philippines, are "doers" out to reverse, however imperfectly, decades of stagnation and corruption.

Even in Eurasian countries that are undemocratic, a desire for economic growth acts as a moderating force in their relations with one another. Their pursuit of regional trade pacts points to their priorities. Geopolitical faultlines persist, such as between the two most populous countries, India and China, and intra-Eurasian war remains a risk. But it is not the super-region's destiny. ■



Also in this section

32 A landmark month for cinema

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Relations with the European Union

The youth and the rich old man

BEIJING

Amid tensions with America, China is reassessing its ties with Europe

A REMARKABLE summit between the European Union and China in Beijing on July 16th marked a turning-point in Chinese views of the EU. Rules and laws bind the EU's 500m citizens together, albeit scratchily at times. Chinese leaders are sniffy about polities that espouse rule of law as a founding principle. The Communist Party prefers to talk of "rule by law". Rules are tools by which the strong exercise power over the weak. American talk of a rules-based order, notably, strikes China as the purest hypocrisy—a figleaf covering a superpower's lust for dominance. Unable to bully its way past America, China has often tried to press European governments to bend or break rules that it found inconvenient, seeing the Old Continent as cash-strapped, malleable and easy to divide.

Yet face to face with European bureaucrats this week, President Xi Jinping and his team agreed, in effect, that the one thing worse than an American-led world was one with no rules at all. The cause of this shift, as with so much else, is President Donald Trump. Western governments have spent 20 years telling Chinese leaders that a rules-based global order is not a plot to contain China, but a source of stability that has enabled their country's rise. Rather than chafe at American-led security alliances in Asia, China has been urged to see how it gains when its exports steam along sea lanes open to all. When Chinese envoys grouse about a world trade and finan-

cial architecture designed in Western capitals after the second world war, they have been reminded how globalisation has powered China's growth.

On paper the big achievement of the China-EU summit was a Chinese agreement that the World Trade Organisation (WTO) must be reformed if it is to survive these Trumpian times. The meeting also unblocked talks about the further opening of Chinese and EU markets to bilateral investment and trade (see Briefing). But the real drama involved China's reasons for making those concessions.

In closed-door remarks conveyed to Beijing-based ambassadors from the EU's 28 member countries, Mr Xi said that China feared a trade war with America but would not flinch from one. He accused Mr Trump's administration of behaving as if it were taking part in a freestyle, no-rules boxing match. Going beyond his public rhetoric about China as a champion of an open global economy, Mr Xi told his guests that China and the EU could not watch the old order being destroyed, and a vacuum being created.

For his part Donald Tusk, who as president of the European Council represents EU national governments, privately told his hosts that even as they met in Beijing, they needed to reflect on a meeting happening at the same time in Helsinki between the American and Russian presidents, and on threats to the post-war global

order. He said that order had brought peace to Europe, prosperity to China and ended the cold war between East and West. Mr Tusk repeated those fears at the summit press conference. Nodding to the meeting between Mr Trump and Vladimir Putin, he declared that "the architecture of the world is changing before our very eyes". He urged Europe, China, Russia and America "not to destroy this order but to improve it".

Earlier this year China dreamed of forging an anti-Trump coalition with Europe, which is China's second-largest trade partner, exchanging goods worth \$667bn in 2017. Chinese officials discreetly urged EU counterparts to distance themselves from American complaints about China's trade tactics and join them in complaining about a welter of American tariffs, slapped on Chinese goods and European steel alike. That was an error. European officials explained that though they disagreed with Team Trump's tactics, they agreed with the substance of America's grumbles about China's forced transfers of technology, uneven protection of intellectual property and state subsidies for its firms.

A new approach

Stung, China changed tack. At the summit in Beijing the prime minister, Li Keqiang, said that talks with the EU on reforming trade rules were not aimed at America, Russia or any other country. Instead Mr Li talked up moves to open China's economy to Europe, including allowing BMW, a German carmaker, to take a controlling stake in a local partner. He announced a doubling of fines for anyone abusively extracting trade secrets from business partners.

Alas, those warm words fall on sceptical ears. In June almost half of respondents to a business-confidence survey by the European Chamber of Commerce in China said they expected regulatory obstacles ►►

► to increase in the next five years. Jean-Claude Juncker, president of the European Commission, the EU's executive arm, noted in Beijing that European direct investment into China had hit a low of €6bn (\$7bn) in 2017, compared with €30bn invested by China in the EU. The green light given to BMW proves that China "knows how to open up" when it wants to, Mr Juncker added waspishly.

Chinese interest in the EU hit a peak in 2003, at a moment when it looked as if the union was getting a constitution, a foreign minister and a full-time president, and was defying America over the invasion of Iraq. That honeymoon ended a few years later as Europe proved unwilling to challenge American hegemony. At a policy conference in Sweden in 2009 a Chinese participant captured the mood when he called

America a strong man and China a teenager, but Europe a decadent "rich old guy".

China spent years pressing the EU to lift an arms embargo imposed after the crushing of the Tiananmen Square protests in 1989, to keep quiet about Chinese garrison-building in the South China Sea and to support China's claim to "market-economy status" at the WTO, which would make it harder for Europe to accuse China of dumping. Chinese envoys unblushingly told EU diplomats to grant these concessions because "we should be given this." Disputes over the South China Sea, trade and market-economy status meant that EU-China summits in 2016 and 2017 ended testily without joint statements.

Yet at this year's summit China did not mention the market-economy topic. The once-burning issue of the arms embargo has also been largely shelved. In the words of François Godement of the European Council on Foreign Relations, a think-tank, China's urgent concern is propping up a profitable status quo in the global trading system: "What they have they want to keep. That's the 'big ask'."

Keeping the status quo, China now sees, involves defending the rules-based order. Still, differences lurk. China may now accept that the WTO needs fixing, but its motives are not Europe's. In talks this week between Liu He, Mr Xi's economic adviser, and Jyrki Katainen, a vice-president of the European Commission, Mr Liu appeared to view stronger trade rules as mainly a way to restrain America. The EU wants to shore up the global trading system to bear China's fast-growing weight.

Wang Yiwei of Renmin University, who worked at China's mission to the EU in Brussels, pinpoints perhaps the most important point of difference. China sees Mr Trump as a herald of America's future as an angry, deindustrialised power, he says. But Europeans hope that Mr Trump is an aberration: "They are waiting for the mid-terms, or another president."

That leaves China quietly testing Western unity where it can. Days before the EU summit, Mr Li, the prime minister, was in Bulgaria for a meeting of the "16+1" group of former communist countries from east and central Europe. Eleven of its members belong to the EU. Founded at China's urging in 2012, the group saves China the bother of courting some of Europe's smaller countries separately and offers those tiddlers an annual meeting with China's prime minister. The group increasingly frustrates its larger members, notably Poland, which only sent a deputy prime minister to the recent meeting. Officials in Brussels and Berlin view "16+1" as a bid to divide Europe and thus the West. That is not impossible. For now, though, a united Europe has its uses. China is impatient for great-power status. Rules-free conflict with the West will not help it get there. ■



Cinema

Mark-up madness

A blockbuster film prompts the government to cut drug prices

“I CAN'T believe the censors let this one slide”, remarks an online commentator on Zhihu, a question-and-answer forum. He was referring to “Dying to Survive”, a dark comedy released on July 5th which is on track to become one of China's highest-grossing productions of all time. The film, which raked in a record \$200m in its opening weekend on a budget of just \$15m, is based on the true story of Lu Yong. Mr Lu was arrested in 2013 for peddling knock-off cancer drugs imported illegally from India (the actor playing him is pictured, wearing sunglasses, along with two others in roles as smugglers-cum-patients).

This month will also be noted in Chinese cinematic history for a different reason. On July 15th “Asura”, the most expensive film ever made in China at \$113m, was pulled from cinemas just three days after its launch owing to dismal box-office takings. The fantasy film had collected a humiliating \$7m.

The contrasting popularity of the two films should worry China's cultural commissars. “Dying to Survive” has been a huge success despite being a radical departure from China's film policy, which is to encourage the production of uplifting fare that presents the government in a good light. Chinese-made films hardly ever touch on sensitive social issues. “Dying to Survive”, however,

confronts the problem of unaffordable drug prices head-on. A study in 2012 found that a fifth of commonly used Western medicines were more expensive in China than anywhere else.

The film has clearly touched a raw nerve among viewers. Perhaps to stave off criticism, the medical-insurance administration announced last week that it had invited ten foreign and eight domestic drug companies for “negotiations” in a bid to drive down prices. On July 10th the food and drug authority said it would speed up approval of foreign drugs. Bruce Liu of Fudanin, a health-care consultancy in Shanghai, predicts that cinema-goers' spirited reaction will prompt the government to include more drugs on its public-reimbursement scheme. Government censors may have come to regret giving the film the green light. They have reportedly asked promoters to tone down the marketing.

The spectacular flop of “Asura”, which glorifies Tibetan mythology, suggests that trying to engineer a Hollywood-scale blockbuster by adding special effects to a politically correct script is unlikely to work. China, for all its grand ambitions, has yet to find a winning formula. If the past month is any guide, it is the more freewheeling films that are likelier to be box-office hits. For the government, that is not good news.



Also in this section

- 34 Djibouti's entanglement with China
- 34 Turkey in Syria
- 35 Morocco's new friends
- 35 Infertility in Nigeria
- 36 Slavery in Mauritania

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Red Sea scramble

Ports in the Horn

ABU DHABI AND DUBAI

Shipping gives the United Arab Emirates (UAE) a foothold in east Africa. But it also draws rivals, from Qatar to China

IT SEEMED an irrational decision 20 years ago. DP World is one of the world's largest maritime firms. From a squat office overlooking Dubai's bustling Jebel Ali port, it directs operations in 40 countries. Most are in busy shipping hubs such as London and Rotterdam. But in the 1990s it started making surprisingly big investments in the Horn of Africa. It built a large port in Djibouti, and is now working on another in Somaliland (see map). The combined GDP of the two African entities is smaller than that of Moldova. Yet the firm sees the region as a land of opportunity.

So do the rulers of United Arab Emirates (UAE), one of whose components, Dubai, owns a majority stake in DP World. It is one of several Gulf states trying to gain a strategic foothold in east Africa through ports. Controlling these offers commercial and military advantages but risks exacerbating tensions in the region.

Executives at DP World argue that Africa needs many more ports—especially in the Horn, where conflict has stifled trade. Ethiopia, populous and fast-growing, lost its coastline when Eritrea broke away in 1991. Its 105m people rely on Djibouti for 95% of their trade. Farther inland, countries such as South Sudan, Uganda and Rwanda struggle to reach markets. DP World thinks the region from Sudan to Somalia needs 10-12 ports. It has just half that. “The whole Horn of Africa is short of ports. It's stifling,”

says one executive.

The firm's first foray was on Djibouti's coast. When DP World won its first concessions there in the 1990s, the Emiratis were among the few investors interested in the small and poor former French colony. DP World built and operated a new container terminal, Doraleh, and helped finance roads and other infrastructure. Doraleh is now the country's largest employer and the government's biggest source of revenue. It runs at nearly full capacity, handling 800,000 containers a year. Much of its cargo travels along a Chinese-built railway from Addis Ababa, Ethiopia's capital.



Djibouti's profile rose further after the terrorist attacks on America of September 11th, 2001, when America opened a military base there. France and China also have bases; other navies patrol off its coast to deter Somali pirates. But when the Emiratis wanted to open their own naval base they were rebuffed, partly because of their close ties to Djibouti's rival, Eritrea (the two states had a bloody border dispute in 2008). In 2015 the UAE started building a naval base in Assab, in southern Eritrea. The base has been used in the Saudi-led war against Houthi rebels in Yemen. It would be the jumping-off point for a mooted amphibious assault on Hodeida, Yemen's main port, now the focus of heavy fighting. The UAE also helped mediate Eritrea's peace deal with Ethiopia signed on July 9th, ending decades of hot and cold war. If it holds, the truce could end UN sanctions and open Eritrea to investment. Assab and another port, Massawa, could be expanded.

In 2016 DP World won a 30-year concession to operate the port of Berbera in Somaliland, which declared independence in 1991 (though no foreign government recognises it). Critics said the deal would hasten the break-up of Somalia. Djibouti was upset for different reasons. With a planned capacity of 1.25m containers, Berbera would erode Djibouti's monopoly on Ethiopian cargo. Indeed, Ethiopia acquired a 19% stake in the port earlier this year. All this could cost Djibouti hundreds of millions in annual transit fees.

It would also cement the UAE's place in a strategic region. Uniquely among Arab states, it tries to project military power far beyond its borders. The Horn ports all sit near the Bab al-Mandab strait, a vital choke-point at the mouth of the Red Sea: 4.8m barrels of oil passed through it every ►►

► day in 2016. Competition is getting fierce, though. Qatar and its ally, Turkey, are building ports in Sudan. Saudi Arabia is in talks to set up a naval base in Djibouti. All three Gulf states are trying to snap up farmland in east Africa, part of a broader effort to secure food supplies for their arid countries. Emirati-built ports could one day export crops from Emirati-owned farms.

As the Gulf states move in, however, they bring their own conflicts to a troubled region. Qatar helped to end the clashes between Djibouti and Eritrea and kept peacekeepers there for almost a decade. Then came the bust-up of 2017, when four Arab states, including the UAE, imposed an embargo on Qatar. Both Djibouti and Eritrea sided with the blockading states. Qatar pulled out its troops, and Eritrea soon seized the disputed territory from Djibouti.

Gulf states could also find themselves in competition with China. The UAE hopes to be part of China's Belt and Road Initiative, a scheme to invest hundreds of bil-

lions of dollars in infrastructure such as roads and ports. Jebel Ali is the busiest port outside Asia, and already acts as a hub for trade with Africa. But China may want to cut out the middleman. In 2014 Djibouti tried to toss out DP World. It accused the firm of paying bribes to secure its Doraleh concession. Arbitrators in London found the claim meritless.

In February Djibouti dropped the legal niceties: it simply seized the port. The government says DP World failed to expand the port as quickly as promised. Shippers believe it took Doraleh as a sop to China, to which it is heavily indebted (see next article). In July Djibouti opened the first phase of a new \$3.5bn free-trade zone, set to be the largest in Africa when it is finished. Built mostly by state-owned Chinese firms, it sits next to Doraleh. DP World says the project violates the terms of its concession and is threatening to sue. The UAE helped to put Djibouti on the map. Now, ironically, it may find itself frozen out. ■

Djibouti in deep water

The risk of relying on Chinese cash

DJIBOUTI

Deals and debt have remade one of Africa's smallest countries

DJIBOUTI was the last of Europe's African colonies. France clung to this sliver of Red Sea coast until 1977; even today it occasionally resembles occupied territory. In the black lava desert stands a hilltop garrison of the Foreign Legion. French tanks trundle along the narrow road to Ethiopia. This whiff of colonialism helps explain why many Djiboutians fret about their independence.

China is the country's biggest investor. It plans to remake Djibouti as a staging post on President Xi Jinping's flagship Belt and Road Initiative. In the past two years Beijing has lent Djibouti some \$1.4bn, more than 75% of its GDP. In 2015 the country was Africa's fifth-biggest recipient of Chinese credit, despite hav-

ing barely 1m citizens, one of the continent's smallest populations.

Djibouti's experience shows how Chinese cash can transform even the smallest country. "None of this would have been possible without China," says Mahamoud Ali Youssouf, the foreign minister. He sniffs at warnings, most recently from Rex Tillerson, a former American secretary of state, that Chinese deals could undermine sovereignty.

At the end of 2016 China owned 82% of Djibouti's external debt. The Chinese ambassador to Djibouti has told diplomats privately that China expects to be repaid in cash or in kind. Many see the experience of Sri Lanka, whose indebted government last year handed over one of its ports to China, as a troubling precedent, though Ilyas Moussa Dawaleh, the finance minister, insists that a debt-for-equity swap of this kind would not apply to Djibouti. "Our sovereignty is non-negotiable," he says.

But some fret that the dependency of an earlier era has been replaced by a more subtle kind. "We would really like to have more than one big partner," admits Mr Youssouf. Rents from ports and military bases have helped keep President Ismael Omar Guelleh in power for almost 20 years. Opponents say Chinese largesse has further cemented his position. "It's a relationship with the regime," says Daher Ahmed Farah, an opposition leader. "Not the country."



Who is in the driver's seat?

Turkey in Syria

You break it, you own it

AFRIN

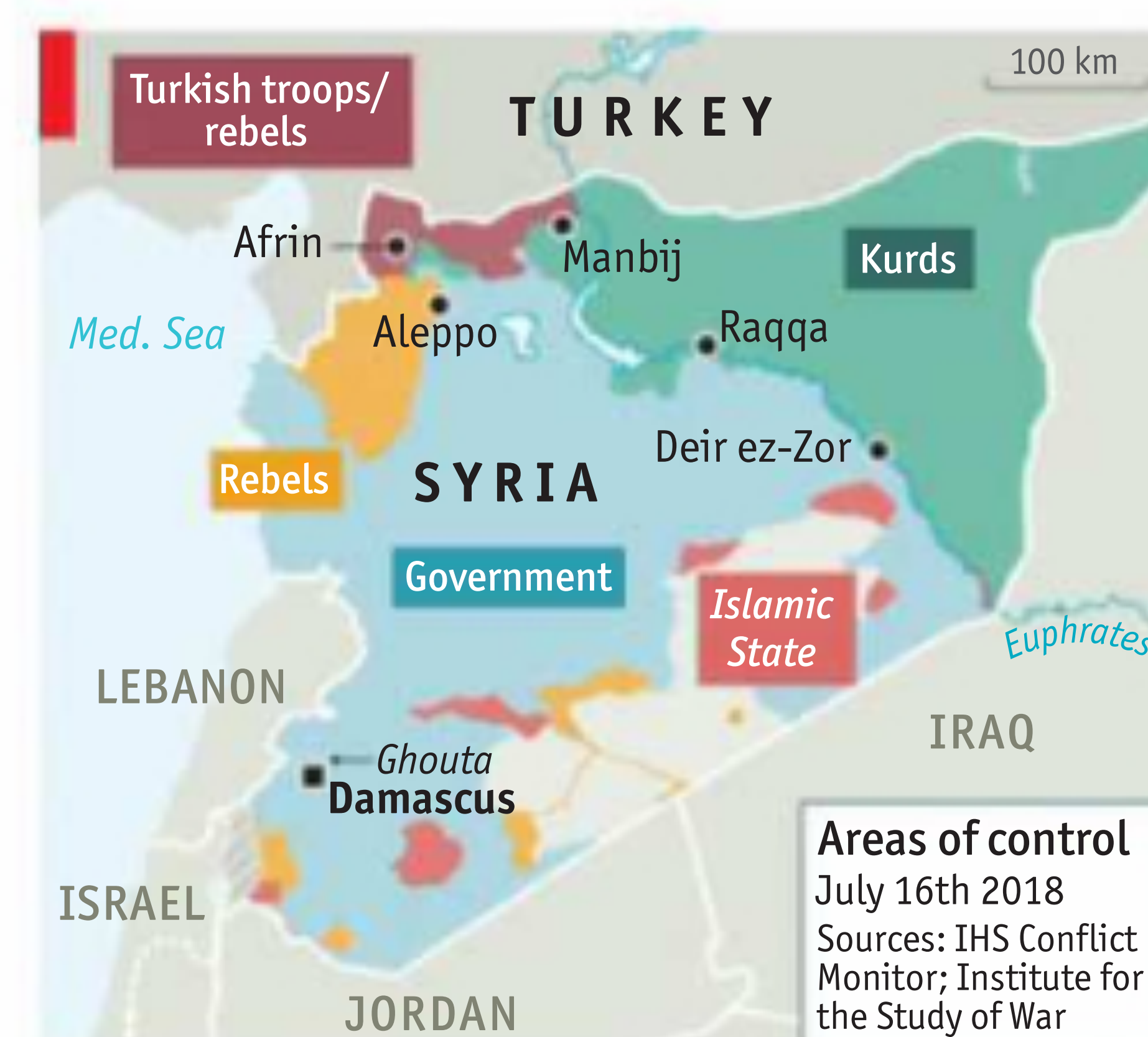
Turkey is struggling to keep order in its enclave in northern Syria

THE scene in the centre of Afrin, a Kurdish city in north-western Syria, hardly inspires confidence in the future. A destroyed statue of a mythical Kurdish hero is a reminder of the plunder of the city after its capture earlier this year by Arab and Turkoman rebels backed by Turkish tanks, from Kurdish rebels. The teenage son of one of the Arab rebels peddles cigarettes, a rifle across his knees. Another rebel directs traffic. Turkey argues it saved Afrin from terrorists and boasts of opening schools and hospitals. Residents are not exactly brimming with gratitude. "The Turkish soldiers are behaving decently," says a Kurdish merchant. "But the bearded ones are big trouble," he adds, referring to Islamist militants. "They've stolen so much."

More than 100,000 civilians, and scores of Kurdish fighters known as the People's Protection Units (YPG), fled Afrin when the Turkish army and its proxies swept in. Turkey considers the YPG an extension of the Kurdistan Workers' Party (PKK), which has fought an insurgency against it for three decades. The Turks insist they have no plans to annex Afrin, and pledge to withdraw as soon as Syria's war ends.

But the changes wrought by the incursion may be hard to undo. Turkish ministers suggested Afrin would become a magnet for some of the 400,000 Syrian Kurdish refugees in their country. However, it is mostly Arabs pouring into the region. (The YPG has not helped, reportedly stopping displaced Kurds from going home.) During a tour of the city organised by Turkish authorities, your correspondent met refugees from Ghouta, the Damascus suburb bombed to ruins by Syrian and Russian warplanes. One wave of human misery was breaking over another.

Turkey's president, Recep Tayyip Erdoğan ►►



► gan, does not intend to reverse the tide. He has threatened to take the war against the YPG into other parts of Syria. This puts him on a collision course with America, which teamed up with the Kurds against Islamic State (IS) and still sees them as insurance against an IS resurgence. (It denies their links to the PKK.) Mr Erdogan is not persuaded. “We have told all our allies and friends not to stand between us and terrorists,” he said earlier this year. The prospect of an escalation is not far-fetched. Insurgents allied with Turkey have clashed with American troops in eastern Syria.

Tensions between the two allies have recently eased. Under Turkish pressure, the Americans persuaded the YPG to withdraw from Manbij, which the Kurds captured from IS two years ago. Turkey and America also agreed to co-ordinate patrols. But Turkey now says that unless YPG forces east of Manbij disarm, it will be only a matter of time before Turkey attacks the group. “The plan is for the YPG to go without a fight, but if they want one we will give them one,” says one Turkish diplomat.

But Turkey may have bitten off more than it can chew. Security in Afrin is getting worse. A double bombing in June killed nine people. Reports of infighting and looting continue to surface. People in Afrin chafed under YPG rule, a local resident says, but the insurgents who followed are worse. “The Turks must make these monsters go home.” ■

Morocco's new friends

Making eyes across the Sahara

But some neighbours are resisting the kingdom's charm

KING MOHAMMED VI of Morocco has had a quiet year. The monarch, who has visited at least 14 African countries since October 2016, scaled back his travels after a heart operation in February. But he still managed to play host to Mali's prime minister in March and visit Congo-Brazzaville in April. Last month he took the Nigerian president, Muhammadu Buhari, on a motorcade tour of the capital, Rabat, flattering him with cheering spectators.

Like their king, Moroccan companies are also lavishing attention on west Africa. The African Development Bank estimates that 85% of Morocco's outward foreign direct investment (FDI) goes to sub-Saharan Africa. Trade lags behind, but this too is growing. Exports of Moroccan goods to west Africa tripled from 2006 to 2016. The king brings large trade delegations on his marathon African tours, usually signing a raft of deals with his hosts.



The King and Buhari

Politically, it is easier for Morocco to cultivate allies across the Sahara than in its own neighbourhood; regional integration in the Maghreb is hampered by a long-running rivalry with Algeria. After intense lobbying Morocco was readmitted to the African Union (AU) last year, ending a 32-year absence. Morocco had stormed out in 1984 after the AU admitted as a member state Western Sahara, which Morocco says is part of its territory. With the Economic Community of West African States (ECOWAS) considering Morocco for membership, the charm offensive continues. It has donated 25,000 tonnes of fertiliser to Guinea and trained 300 Malian imams.

Economically, engagement with west Africa lets Morocco diversify from its traditional focus on Europe, says Issandr El Amrani of the International Crisis Group, a think-tank in Brussels. Even though Morocco has emerged as a low-cost manufacturing hub for European firms, its own companies struggle to compete in Europe. But they can thrive in west Africa.

Moroccan banking, telephone and insurance companies have led the charge. In 2015 they made up 88% of the country's FDI in sub-Saharan Africa. Its three largest banks have almost a third of the market share in the eight countries that use the west African CFA franc. Attijariwafa, the largest, has 443 west African branches. Itisalat al-Maghreb, the country's largest telecoms company, generated 43% of its turnover last year from subsidiaries in the region. Morocco also hopes to host the regional headquarters of Western firms doing business in Africa. It has established a financial hub in its economic capital Casablanca, offering tax breaks as a lure. Membership of ECOWAS would extend its reach. Goods exported from Morocco to other ECOWAS members would be exempt from the bloc's common tariff.

But Morocco's bid to join has exposed the limits of its influence. All seemed well

last June, when ECOWAS agreed “in principle” to its accession. But west African businesses were less keen, fearing Moroccan competitors would crush them. Criticism is loudest in Nigeria, ECOWAS's largest economy. Many there fret that Morocco would benefit from freer trade but wriggle out of other rules, like visa-free travel. Its application now seems stalled. Recent ECOWAS summits avoided the subject.

The kingdom still hopes to charm its way in. During Mr Buhari's recent visit to Rabat, he and the king agreed to build a gas pipeline from Nigeria to Morocco. But the plan has no financing and its feasibility is open to doubt.

For all the kingdom's investment in west Africa, ordinary Moroccans aren't yet reaping the benefits. Banking and telecoms investments abroad do not generate many jobs back home. Meanwhile 43% of the urban young are said to be unemployed and the Rif region in the north is restive. Before planning his next west African tour, the globe-trotting king may need to deal with domestic concerns. ■

Infertility in Nigeria

A bad place to be barren

LAGOS

In a country with lots of babies, infertility treatment is booming

IN A rough-and-ready church in Ifo, on the northern fringe of Lagos, Prophet Emmanuel Akanni and Prophetess Foluke Akanni do extraordinary things. During moments of religious ecstasy, Mr Akanni receives visions that indicate which of his congregants are struggling to conceive children. By holding a chicken's egg over a woman's belly, he claims to be able to spy into her womb. Then he uses herbs and prayers to effect a cure. “There is nothing God cannot do,” adds Mrs Akanni.

The fertility rate in Nigeria is estimated to be 5.4, implying that the average woman can expect to have that many children during her life. Yet many Nigerians experience infertility. Chelsea Polis of the Guttmacher Institute, a think-tank, and her colleagues estimate that 31% of Nigerian couples fail to conceive a child after 12 months of unprotected sex—a rate at least as high as in the West. In a country where a woman's worth is defined largely in terms of her ability to bear children, there is a growth market for fertility treatments of all kinds.

When Richardson Ajayi created the Bridge Clinic in 1999, in vitro fertilisation (IVF) was still a novelty in Nigeria. He had to fly in doctors and send blood samples abroad for hormone analysis. Today the technology is widespread, and private IVF ►►

► clinics are popping up in wealthy parts of Lagos. “You buy an incubator, you go on television, and if you’re good-looking, you’ll get patients,” says Dr Ajayi, disapprovingly. Mr and Mrs Akanni face similarly strong competition from other religious healers. “Jesus gives miracle babies here,” reads a placard on a nearby church.

Many Nigerian women struggle to conceive because they have been harmed by sexually transmitted diseases such as chlamydia, or by infections picked up during unhygienic abortions or previous deliveries. Others have infertile partners. One study of 246 couples seeking fertility treatment in a Lagos hospital found that 52% of the men had a low sperm count or another problem that made it hard to conceive.

Few men, however, will countenance the idea that the problem lies with them. Infertility is “a one-sided thing”, says Kemi Ailoje, who founded the Lifelink Fertility Clinic in Lagos two years ago. The notion that barrenness is a female malady is so strong, she says, that many women are obliged to pay for treatment out of their own pockets. They often turn up in her clinic in their early 40s, because it is only at that stage of life that they have amassed enough money.

Women have good reason to spend their savings. One study in Kano, a northern city, found that 38% of women seeking fertility treatment in a hospital had been physically or verbally abused. Just 7% of pregnant women said the same. Other women are abandoned or displaced. Dr Ajayi says that many men in childless marriages will remarry. It is only after they fail to impregnate their second or third wives that they seek medical help. As a result, almost all the men who enter his clinic turn out to have fertility problems.

Medical treatment can be expensive, especially when both partners have problems. A single ivf cycle in a Lagos clinic costs around 1m naira (\$2,800), which is cheaper than in the West but far out of reach of the average Nigerian. Because so many clients are in their 40s, treatment is often unsuccessful. Dr Ailoje says that many infertile couples could have been treated fairly easily and cheaply had they sought help earlier. But many are unaware of the science of fertility, and neither the Nigerian government nor aid agencies have tried hard to educate them.

So the pastors and the traditional healers thrive. In Sango Ota, another town on the outskirts of Lagos, Prophet Okanlawon Mayowa of the Cherubim and Seraphim church sees between one and three new clients per month. He charges 50,000–100,000 naira for treatments that include saying prayers over water, which infertile couples then drink. He also uses herbs. Your correspondent asks which ones. Why, jokes Mr Mayowa—is he thinking of getting into the fertility business, too? ■

Slavery in Mauritania

Slave to its past

NOUAKCHOTT

Protesters against slavery are often jailed, while slavers walk free

A FEW miles from the green grass of Mauritania’s presidential palace, in a slum where the Sahara washes into the capital, Mbarka shields her five-year-old son’s eyes from the dust. She was his age when her mother gave her away to be a slave.

Mbarka’s mother was herself a freed slave. But when her former master said he needed help at home, tradition dictated that she had to give up her daughter to him. Mbarka did all the chores she could but the family still beat her. She doesn’t remember how old she was when the father and his son started to rape her, but she had her first child at 13.

Mauritania, with its tiny economy and population of just 4.3m, would normally attract little attention. But its vast expanse—it is four times larger than Britain—and its position astride migration and smuggling routes across the Sahara have pushed it to prominence. This month France’s president, Emmanuel Macron, visited it to discuss co-operation in fighting jihadists. Mauritania is a member of the G5 Sahel, a regional counter-terrorist force with troops from five countries. And it is the biggest recipient per head of money from an EU fund for Africa that is aimed at reducing migration.

Yet Europe’s growing relations with Mauritania are accompanied by silence concerning its record on human rights and democracy. Its president, Mohamed Ould

Abdel Aziz, came to power in a coup in 2008. His government arrests opponents and has sentenced one to death for apostasy. A court has since commuted the sentence and ordered the man’s release.

Perhaps most shameful is its reluctance to curb ethnic discrimination and slavery. Mauritania is deeply divided along lines of caste and ethnicity, and between former slave-owners and ex-slaves. In 2017 the UN’s Special Rapporteur on extreme poverty, Philip Alston, noted that two of the main ethnic groups, Haratines and Afro-Mauritians, which together make up two-thirds of the population, are absent “from almost all positions of real power”; nearly all important positions are filled by the Beydane, or Arab Berbers.

Although slavery was abolished in 1981 and criminalised in 2007, the “spirit of slavery” lives on, says Balla Touré, an anti-slavery activist. People may be legally free, but discrimination, social pressure, poor education and the lack of identity papers mean that thousands still live in de facto slavery, says Mr Touré.

The Global Slavery Index, compiled by the Walk Free Foundation in Australia, said that in 2016 some 43,000 people, or 1% of the population, were slaves. SOS Esclaves, a local anti-slavery organisation, reckons the real figure is much higher.

For its part, the government denies slavery or racial discrimination still exist. Under pressure, it has set up four slavery courts, but these have convicted only five people since 2015 for slaving offences. None of them served more than two years. The government is far more energetic in suppressing anti-slavery protesters, arresting more of them than actual slavers. There have been at least 168 arrests of human-rights campaigners from July 2014 to July 2018, says Amnesty International, a human-rights organisation. Two leading anti-slavery activists, Moussa Biram and Abdallahi Matallah, have been tortured and kept in prison for two years. The government’s reluctance to act against slavery is easy to explain, says Mamadou Sarr, a director of the National Forum of Human Rights Organisations: almost everyone in power has someone in his family who is a former slave-owner.

Campaigning even on other issues is risky. Last year Oumou Kane, the founder of Amam, a women’s-rights group, led a protest asking the government to issue identity documents to poor people. Only 70 people attended the march, but the police still arrested ten of its leaders.

Outside her wooden shack, Mbarka says she eventually escaped with the slaver family’s driver. She had to leave her children behind, and was not reunited with them until years later. “I try not to hate,” she says, staring at her nails, painted a fiery orange, but the pain in her voice is louder than her words. ■



Almost born a slave



The Trump-Putin summit

In the Hall of Mirrors

HELSINKI

Two depressingly similar presidents meet

IF GEORGE W. BUSH once famously looked Vladimir Putin in the eye and saw his soul, Donald Trump, when he met the Russian president in Helsinki on July 16th, saw his own reflection: an alpha male who made his country “great again”; a fellow populist and disrupter who disdains the politically correct and hypocritical liberal elite, and the institutions they inhabit; a man guided by interests, who likes doing deals while trusting nobody and who uses the media to create his own reality show. Vladimir Putin saw in Mr Trump a confirmation of a long-held belief that Western leaders operate in exactly the same way as he does and only pretend to have “values”.

Appropriately enough, the meeting took place in the Hall of Mirrors at the presidential palace in Helsinki. It was both an imitation and a reversal of traditional foreign-policy engagements. Stylistically, it resembled cold-war summitry. But unlike past summits, it lacked a clear agenda or substance. There was little change in the official position of the two countries on Ukraine, Iran or Syria, and no breakthrough on nuclear-arms reduction.

The main happening took place without any officials, other than interpreters, behind closed doors. The sinister explanation for that was that Mr Trump had something to hide and made secret promises and deals. The cynical one is that the secrecy concealed a dearth of meaning. Unlike

previous summits, where an event is turned into a spectacle by the media, this time the spectacle itself was the event, staged for the benefit of the press.

As an experienced actor, Mr Putin stole the show. An hour late, he made a dramatic entrance, arriving in his new Russian-made Kortexh limousine, which looked bigger and heavier than Mr Trump’s “Beast”. But it was Mr Trump, in his supporting role, who introduced the first note of the absurd. In a morning tweet, he blamed the dismal state of Russia-America relations not on the Kremlin—even though it has annexed Crimea, shot down a passenger airliner and interfered in America’s presidential election—but on America’s past foolishness and stupidity, and now on “the Rigged Witch Hunt”. The Russian foreign ministry promptly answered with a retweet: “We agree.”

It was not the only thing on which Mr Putin and Mr Trump agreed. The distortion of reality became more striking as the two men emerged from the Hall of Mirrors and into a press conference. Mr Trump laid into the FBI and the investigation led by Robert Mueller, a “ridiculous” probe which on July 13th indicted 12 Russian GRU (military-intelligence) officers for cyber-attacks and interference in the American election. Mr Trump said that he saw no reason “why it would be” Russia’s interference—by which, the president clarified a day later,

Also in this section

38 Corruption in eastern Europe

38 The rise and fall of xenophobia

39 Turkey’s ultra-nationalists

39 Franco’s ghost

40 An interview with Bruno Le Maire

41 Charlemagne: The Airbnb backlash

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he meant “wouldn’t be”.

Mr Putin, for his part, admitted that he had rooted for Mr Trump to win the 2016 election, while also denying that he ordered any meddling in it. As though mocking Mr Mueller, he invited FBI investigators to visit Russia to interview the 12 GRU officers, in exchange for the GRU questioning its own targets, including a former American ambassador, Michael McFaul. (“An incredible offer,” Mr Trump said.) As a symbol of appreciation, Mr Putin presented Mr Trump with a football, brought from his other show—the World Cup.

This was not meant as a challenge, but as a friendly pass, for Mr Trump and Mr Putin play on the same side. They are united against a common enemy: the liberal, globalist establishment personified by Hillary Clinton and her supposed sponsor, George Soros, who tried to subvert the presidential campaign of both men, as they see it.

The summit was less about foreign policy than the internal politics of both countries. Mr Putin thrives on the idea that he is restoring Russia’s status as a great geopolitical power. Nothing irked him more than Barack Obama deeming Russia a “regional power” and likening him to a “bored kid in the back of the classroom”.

To sustain his legitimacy at home, Mr Putin needs America not as a friend, but as an adversary that accepts Russia as an equal. In his state-of-the-nation address in March he showed off cartoons of interception-proof nuclear missiles and accompanied it with a comment addressed to America, but meant for Russian ears: “[They] did not want to talk to us then. Listen to us now!”

The summit was billed in Russia as a confirmation that the message got through. As a good stage partner, Mr Trump delivered a much-needed line: “We ►►

► are the two great nuclear powers” with “special responsibility for maintaining international security”.

Mr Trump, for his part, owes his electoral victory to attacking the establishment and provoking its outrage. If this was his aim in Helsinki, he certainly succeeded. Democrats berated the president, and John Brennan, the CIA director under Mr Obama, called Mr Trump’s performance “treasonous”—a line which was immediately seized upon by the Russian media as another proof of America’s innate hostility

towards Russia.

Yet, if anything, the summit showed that America’s problems are no more rooted in Russia than Russia’s problems are in America. The biggest threat to Russia stems not from America, but its own president, who has undermined the rule of law and the safety of his people. Something similar may now be true of America. As Richard Haass, president of the Council on Foreign Relations, a think-tank, said in a tweet, in Helsinki “America First resembled nothing so much as Russia First.” ■

Corruption in eastern Europe

Miss justice

BUCHAREST AND BRATISLAVA

An enemy of crooked politicians is sacked for being too good at her job

FOR Romania’s corrupt politicians, Laura Kovesi has been a nightmare. Appointed chief of the National Anticorruption Directorate (DNA) in 2013, the implacable prosecutor has overseen the convictions of more than 1,000 officials, businesspeople and politicians, including nine former ministers. In June the DNA won a felony conviction against Liviu Dragnea who, as head of the ruling Social Democrats (PSD), is Romania’s most powerful politician. He could face three-and-a-half years in prison for putting two PSD functionaries on the payroll of the state child-protection agency.

Yet Mr Dragnea’s allies have fought back, implausibly accusing Ms Kovesi of incompetence and of targeting only politicians she dislikes. In February the justice

minister ordered her to be fired, but President Klaus Iohannis refused to sign her dismissal. The constitutional court sided with the government, and on July 9th Mr Iohannis reluctantly sacked her.

Ms Kovesi and the DNA have been a beacon of hope for reformers in central and eastern Europe. Her dismissal is part of a dismal trend. Across the region, upstart clean-hands parties and protest movements face an unfair fight against networks of self-dealing politicians and relentless popular disenchantment.

In Ukraine, where politics is dominated by powerful oligarchs, reformers won a long-sought victory in June when parliament created an independent anti-corruption court. But critics say the new court lacks sufficient powers. Anti-corruption

campaigners face relentless harassment. On July 17th Vitaly Shabunin, one of the country’s top activists, was attacked by thugs and sprayed with green dye as police stood by passively.

Bulgaria, the worst offender in the European Union, hurriedly passed a new anti-corruption law in January after taking over the EU’s rotating presidency. But the new law violates an EU directive by failing to protect whistle-blowers, who would have to identify themselves to submit evidence. In the Czech Republic, the prime minister, Andrej Babis, formed his second minority government in June despite facing charges of fraud.

Slovakia had an inspirational period this spring, after the murders in February of a young investigative journalist and his girlfriend sparked huge protests that forced Robert Fico, the prime minister, to resign. “People couldn’t believe they lived in the sort of country where journalists get murdered,” says Karolina Farska, a 19-year-old student and one of the central figures in the Initiative for a Decent Slovakia, which helped organise the protests. Her group plans to back independent candidates in the country’s municipal elections later this year. But the amateur movement has lost steam, and few people think its transition to electoral politics will be successful.

Good-government parties depend on the diffuse hopes of citizens for a better country. Corrupt parties have more concrete motivations: money, power and the need to protect themselves from the law. Since the PSD took power in Romania in December 2016, “the entire energy of the government has been focused on keeping Mr Dragnea out of jail,” says Dan Barna, leader of the Union to Save Romania (USR), an opposition anti-corruption party.

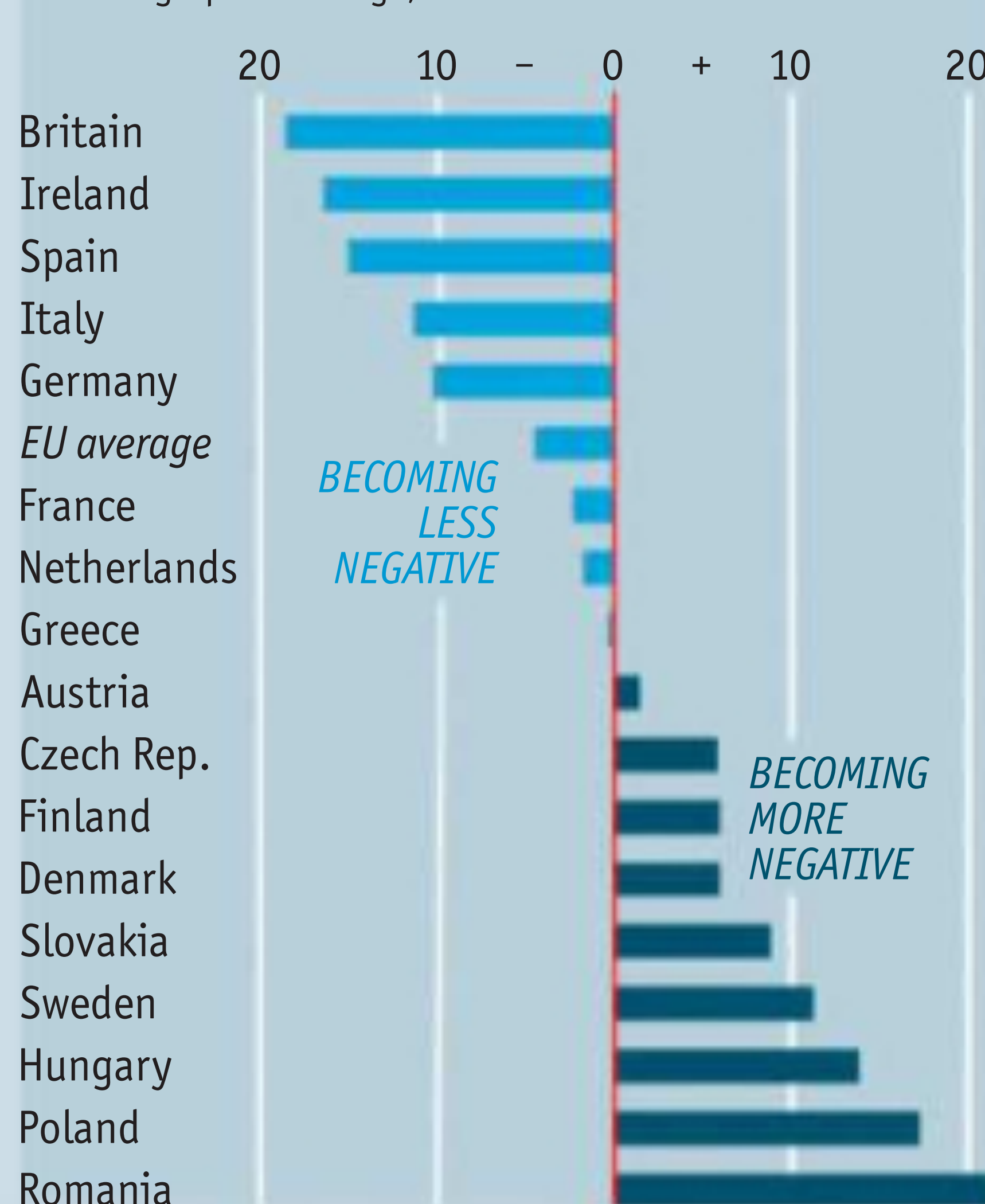
The USR helped organise protests in early 2017 that stopped the government from passing an ordinance to cripple the DNA and exonerate Mr Dragnea. But a new law before parliament would have much the same effect, giving the justice minister more power over the judiciary. The Council of Venice, a European legal advisory body, says the measure could damage the rule of law. The European Commission says it will “take action where necessary” to ensure compatibility with EU law—a veiled threat of infringement proceedings if the new measure goes too far.

The risk is what political scientists call “state capture”: the monopolisation of government by corrupt actors. Exposing scandals without fixing them does little good, says Miroslav Beblavy, a Slovakian MP who in January co-founded Together, a good-government party. This may drive voters to populist parties who promise revenge on elites: “If you see someone pissing in your face every day and there’s nothing you can do about it, that makes you about as angry as you can get.” ■

Xenophobia’s ups and downs

You might assume that the huge inflow of asylum-seekers since 2015 has made Europe more xenophobic. Opinion polls tell a more nuanced story. In November 2014 Eurobarometer began asking citizens of EU countries about their sentiments towards immigrants. Since then, the overall share of people who have negative feelings about arrivals from outside the bloc has fallen from 57% to 52%. Different regions, however, have been pulling in opposite directions. Western and southern European countries have generally become friendlier to foreigners, while northern and eastern countries have grown more hostile. Crucially, though, there seems to be no correlation between how many migrants and refugees a country admitted and its changing opinions of non-Europeans.

Negative sentiment* about non-EU immigration
Percentage-point change, Nov 2014 to Mar 2018



Source: Eurobarometer *Those responding fairly/very negative



Turkey's ultra-nationalists

Dancing with wolves

ISTANBUL

Recep Tayyip Erdoğan's pact with the far right spells trouble

TURKEY'S right-wing nationalists have seldom had it so good. The government of President Recep Tayyip Erdoğan has embraced their main causes, bombing Kurdish insurgents at home and abroad, promoting militarism in education and using siege mentality as foreign policy. Their supporters have reaped the rewards of an alliance with the ruling Justice and Development (AK) party. The *ulkuculer*, as they are colloquially known, have landed scores of jobs in the bureaucracy amid the mass purges that followed the attempted coup of 2016.

They have emerged even stronger from the presidential and parliamentary elections held simultaneously on June 24th. *Ulkucu* voters helped propel Mr Erdoğan to a solid first-round victory. Their main political group, the Nationalist Movement Party (MHP), won over 11% in the parliamentary contest, twice as much as most polls predicted. The ruling AK party, which ended up a few seats short of an outright majority, depends on the nationalists for support. Despite earlier speculation, Mr Erdoğan, who took his oath on July 9th—flanked by democratic heavyweights such as Venezuela's president, Nicolás Maduro, and Sudan's leader, Omar al-Bashir—did not appoint any MHP members to his cabinet. (Instead, he placed his son-in-law, the former energy minister, in charge of the economy, a move the Turkish lira greeted by losing 4% of its value against the dollar in a matter of hours before rebounding slightly.)

The *ulkuculer*, many of whom have

Spanish history

Disturbing Franco's ghost

SAN LORENZO DE EL ESCORIAL

Pedro Sánchez tackles the Valley of the Fallen

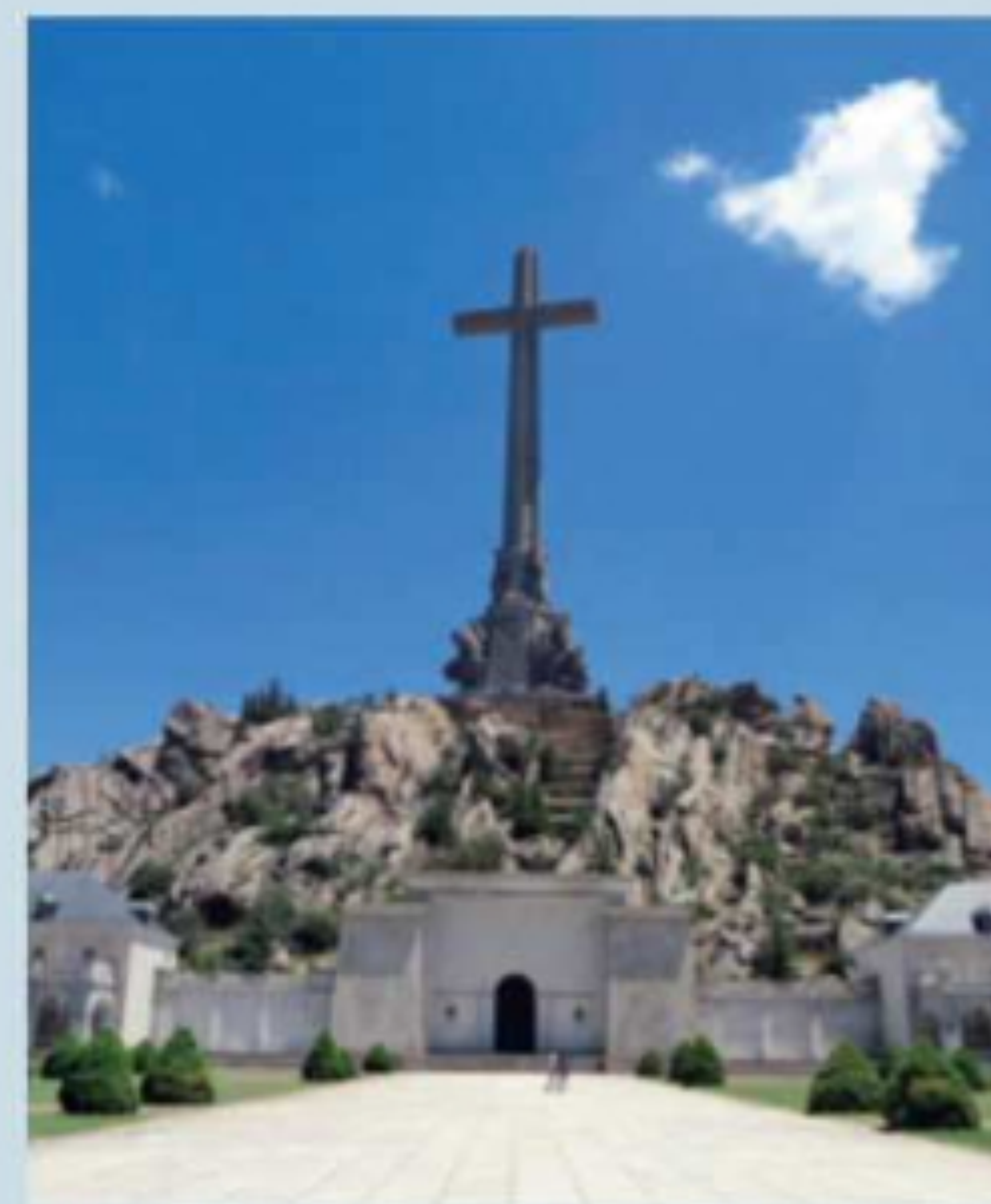
RATHER than a war memorial, it is a monument to a victory. Francisco Franco, whose military rebellion against a turbulent parliamentary republic triggered the Spanish civil war and his 36-year dictatorship, conceived of the Valley of the Fallen as a place to pay tribute to those who died for what he called his "Crusade". Erected over 19 years, using forced labour, it is designed to inspire fear rather than sorrow. Its massive cross on a rocky outcrop in the foothills of the Sierra de Guadarrama is visible from the outskirts of Madrid, and its basilica is a cold vault bored 250 metres into the mountainside. It contains the remains of 33,847 dead from both sides in the war. Only two graves, both in the basilica's transept, are named: those of José Antonio Primo de Rivera, founder of Spain's fascist party, and Franco himself.

In a vibrant democracy, the site has become an aberration. Last year parliament approved a resolution sponsored by the Socialists and supported by all parties except the conservative People's Party (PP) and a Catalan party to move Franco's remains, rebury Primo de Rivera in a less prominent place and "resignify" the Valley as a democratic memorial. Having unexpectedly ousted the PP from government by means of a censure motion in May, Pedro Sánchez, the new Socialist prime minister, is poised to act on the resolution. Franco's remains will be exhumed "in a very short space of time", he told parliament on July 17th.

Only a few diehard *franquistas* actively oppose Mr Sánchez's decision. Several hundred of them staged a protest at the Valley recently. But the PP is discomfited by the issue. Many of its voters are over

60; they grew up in the latter decades of Franco's rule which, while still repressive, saw growing economic prosperity and the creation of a middle class. And many families have forebears who were on opposing sides in the war.

"Our democracy will have symbols that unite citizens," Mr Sánchez promised. That is a worthy aim. To achieve it, the Socialists should restrain their desire to set up a "Truth Commission" about a war that ended almost 80 years ago, or turn the Valley into a "museum of memory", which will doubtless be the version imagined only by one side. Far better to make it a simple national war memorial, help those who still don't know what happened to relatives killed in the war and repression, or where they are buried—and leave the rest to the historians.



Time for Franco to go

connections to Turkey's criminal underworld, have been celebrating their good fortune in style. Two days after the election the MHP's veteran leader, Devlet Bahçeli, took out a full-page advert in a number of newspapers, naming and reprimanding every pollster and journalist who criticised him in the run-up to the election. "We'll never forget what you did," he wrote. Another prominent *ulkucu*, Alaattin Çakıcı, a mafia boss convicted of ordering the assassination of his former wife, went slightly further, threatening one of the journalists Mr Bahçeli had listed, as well as six others, with murder.

Founded in the 1960s, the MHP traces its lineage to the 19th century, when part of the Ottoman elite embraced ethnic nation-

alism and the union of all Turkic peoples as a remedy against the empire's disintegration. During much of the cold war, the *ulkuculer* were driven by opposition to communism. (The MHP's armed wing, known as the Grey Wolves, spent years fighting deadly street battles against leftists.) In the 1990s, the *ulkuculer* backed a scorched-earth offensive against the armed Kurdistan Workers' Party (PKK), accompanied by many human-rights abuses, and opposed any expression of Kurdish identity.

In the early years of AK rule, when Turkey launched accession talks with the European Union and implemented a string of democratic reforms, they receded from view. Their courtship with political ►►

► Islam, which began in the late 1970s, resumed in the 2010s after Mr Erdogan ditched his liberal allies, broke off peace talks with the PKK and went to war with the Gulen community, a powerful sect. An attempted coup in 2016, which the Gule-nists spearheaded, helped consummate the relationship.

Especially today, under a new constitution that places the entire executive in Mr Erdogan's hands, the MHP prizes its power in the bureaucracy much more than any cabinet seats, says Kemal Can, an expert on

Turkey's right. The nationalists will probably shy away from taking an active role in economic and foreign policy, says Mr Can, but they will make sure Mr Erdogan continues to tend to domestic affairs with an iron fist. Although the government ended the state of emergency this week, tough new laws will take its place. In his letter from prison, Mr Cakici boasted about the power his men wield within the police and the army. "You do not own the state," he wrote, addressing Mr Erdogan. "The *ulkuculer* are the state's foundation." ■

An interview with Bruno Le Maire

The adaptable Gaullist

PARIS

A fine balancing act for the French finance minister who switched parties to work with Emmanuel Macron

LESS than two years ago, Bruno Le Maire was an outsider in the race for France's centre-right Republican presidential nomination. Little over a year ago, he denounced another presidential candidate, Emmanuel Macron, as a "man without a project because he is a man without conviction". Today, the "man without conviction" occupies the presidency and Mr Le Maire (who quit his own party) serves as his finance minister. Astonishingly, all this is regarded in France as perfectly normal.

If Mr Macron's hybrid government, which has borrowed from the former left, right and centre, is ever a source of frustration for the self-described Gaullist, Mr Le Maire will not say so. "We are doing exactly what we need to do to be successful in the social and economic transformation of the French model," he insists. In just over a year, the government has cut corporate tax, ended the wealth tax and introduced a flat tax on investment income. The budget deficit has been brought down to below 3% of GDP. Employment rules have been altered to give more flexibility to employers. Mr Le Maire is now piloting through parliament a bill, known as PACTE, designed to cut red tape and help small companies invest, grow and create jobs.

Sticking loyally to Mr Macron's script, Mr Le Maire eschews the word "reform" in favour of the more epic term "transformation": of mindsets, of economic culture, of the French social model altogether. This is no Thatcherite project, however. Mr Macron promised during the campaign to reduce public spending from over 56% of GDP only to 52% by 2022—which would still leave it well above the euro-zone average. A graduate, like Mr Macron, of the elite civil-service training college, the Ecole Nationale d'Administration, Mr Le Maire is unapologetic. "I don't believe that cutting

too far or too quickly is the right way," he says. "We don't want to break with French history." Given his background, it is fair to guess that he would prefer to shrink the state faster. But he will not admit to that.

Indeed curbing public spending, the feeblest element in Mr Macron's record so far, is already becoming the subject of furious resistance. A wide-ranging public-spending review, known as CAP 22, has produced such controversial ideas that, though the report has been leaked, it has not yet been published. Mr Le Maire says he is "determined to reduce public spending" but refers to it merely as "advice" and declines to say when, or whether, it will be published. All ministers have been ordered to contribute an effort. Decisions will now be dribbled out over the summer.

The point, Mr Le Maire stresses, is to improve French competitiveness while maintaining a strong guiding state, which has helped make France one of the few Euro-

pean countries in which inequality has not increased. In a nod to the left, his draft law, for instance, cuts tax on employee share-ownership schemes to encourage firms to spread profits more widely. Yet, to cries of protest on the left, he has also nearly halved the number of subsidised jobs, preferring to encourage private firms to create jobs themselves. France's employment rate, at 65.7% in the first quarter, is now at its highest level since the 1980s.

Mr Le Maire will tell anybody willing to listen that "France is back". The mood, even before the country's World Cup victory on July 15th, has lifted over the past year. Stable policymaking has helped restore French credibility. Less clear, though, is whether Germany is ready to deal with renewed Gallic assertiveness. The French had hoped that last month's European summit would seal an agreement on reforming the euro zone, notably with a deal on a common budget. But migration eclipsed almost all else; such ambitions must now wait until December at least.

Mr Le Maire says he is undeterred by what to many observers looks like a damaging rebuff. He calls "historic" the Franco-German deal reached in Meseberg shortly before the summit, which for the first time agreed to the principle of a euro-zone budget. A fluent German-speaker, Mr Le Maire has already held some 35 hours of meetings with Olaf Scholz, his German counterpart, twice working through the night until dawn.

"We won't impose anything on anybody," insists Mr Le Maire, mindful of smaller countries' reticence. Experience shows, he claims, that "in the end, a Franco-German agreement remains the only basis for consensus among member states". But Franco-German agreement is a necessary rather than a sufficient condition. Besides, Germany, with a weakened chancellor, is in no hurry to act on the objectives it agreed to. Mr Le Maire may have a long wait ahead of him. ■



Le Maire the transformer

Charlemagne | Too much of a good thing

The European backlash against Airbnb is in full swing



TO WAKE up in an Airbnb apartment can be briefly disorientating. Where are you? The brushed steel, the exposed lightbulbs, the mid-century furnishings. The lively walls and bookshelves (a guide for hosts recommends accentuating “personality, not personal items”). The laminated guide to the neighbourhood, the English slightly askew and peppered with exclamation marks. The excellent Wi-Fi. You could be in Lisbon; but perhaps it is St Petersburg? The Verge, an online magazine, describes this Airbnb aesthetic as the “hallucination of the normal”, a phrase borrowed from Rem Koolhaas, a Dutch architect. That is why it can also offer the jaded traveller the sense of a home from home.

Not all Europeans feel the same. Tourists packing for this year’s holiday season might brace themselves for an awkward welcome. Anti-tourist protests in some cities have become a summer ritual. Last August 200 locals occupied a beach in Barcelona to tell visitors to shove off (or at least to stay in hotels). In several cities a plaintive theme has emerged. Airbnb out-of-towners warp districts and upset residents. Grocery shops and libraries that cater for locals are replaced by identikit cafés and bike-rental outlets that serve tourists. As rental homes colonise new areas, residents are forced further out (18% of the properties in central Florence are listed on Airbnb, according to one study.) Airbnb “oligarchs” hoard properties and profits. Tight housing markets in cities like Amsterdam are squeezed further when landlords withdraw properties from sale or long-term rental in favour of the holidaymakers. Not all these allegations are about Airbnb. But the brand funnels anxieties afflicting European cities that feel besieged by mass tourism, and politicians have started to notice. In 2015 Barcelona elected a left-wing mayor who promised to clamp down on the excesses of tourism. She started with Airbnb, fining it for letting out unregistered properties.

If Uber was the terrible toddler of the sharing economy, Airbnb, which celebrates its tenth anniversary next month, behaved as the quieter older sibling. Uber preached (and practised) disruption and chaos, and generally lost its scraps with regulators in Europe. But Airbnb spun a gentler tale, of tourists swapping the anonymity of hotels for the authenticity of districts; of homeowners weaving a few bob out of the spare room. Your columnist’s unscientific Facebook survey uncovered a surprising de-

gree of affection for Airbnb among both hosts and visitors.

Yet if the backlash started in America, Airbnb’s first market, it is now liveliest in Europe, its biggest. From Amsterdam to Berlin to Madrid, city officials are tightening the screws, limiting the number of days for which an apartment may be rented and slapping fines on violators. Paris, the European jewel in Airbnb’s crown, is suing it for failing to take down unregistered listings. (This week, New York moved to require registration too.) The European Commission, the 800-pound regulatory gorilla (see Business section), has generally hesitated to step in. But this week it ordered Airbnb to make some of its charges more transparent or face legal action. The honeymoon is, it seems, over.

In part these are simply the growing pains that accompany any innovation that the old rules do not suit. Even Airbnb’s biggest foes, in the hotel industry it has upended, do not seek its demise (at least not publicly). Some regulatory overreach has been reined in; Berlin, for example, no longer bans apartment rentals on Airbnb outright. Authorities in Amsterdam say their limits on rentals have reduced the number of illegal hotels in the city.

Few think the tensions are over. Residents and tourists in effect operate on different time zones, says Fabiola Mancinelli, of the University of Barcelona. That mattered less when tourists gawped at a few churches before retreating to a large hotel. But it is harder to ignore the visitors who pose for selfies in the local market, sign up for mass bicycle tours, occupy your favourite bar and rattle their wheelie suitcases over cobblestones on their way to catch an early flight. Ironically, visitors who seek to weave themselves for a while into a city’s fabric may cause residents more trouble than those who simply poke around.

The long, dark holiday-rental of the soul

Tighter regulations have hardly crushed Airbnb, as a glance at its listings will show. European cities appear prominently on its latest list of “trending” destinations. Yet to fuel further growth in the run-up to an expected flotation in the next two years, it will need to probe new markets. Business travel is one. Airbnb already allows hosts to sell “experiences” (think kimono-dressing ceremonies or vintage-photography classes). A more marked Airbnb presence could mean more potential tension with residents.

Yet the platform can hardly be blamed for every woe of the mass-tourism age. In contrast to the cruise-ship hordes that have made the centres of Venice and Dubrovnik unbearable, Airbnbbers by definition stay in a city. There is some evidence that Airbnb encourages new trips or at least lengthens existing ones, which suggests tourists are spending cash that would otherwise have stayed at home. Residents of eastern European cities like Warsaw and Zagreb say Airbnb visitors improve standards and foster a spirit of friendliness. And for every weary traveller who thinks Airbnb has lost its soul, ten more appreciate the choice, convenience and competition it offers.

“Great hotels have always been...mirrors to the particular societies they serve,” wrote Joan Didion, a Californian author. Airbnb highlights a quirk of our own age, in which the thirst for the authentic can come at the expense of the locals who are supposed to provide it. Perhaps a regulatory squeeze will eventually return the service to its kip-in-the-spare-room roots, as many European officials hope. Your columnist is among those who have found themselves turning away from Airbnb’s ersatz authenticity in favour of hotels that do not aspire to be anything other than what they are. ■



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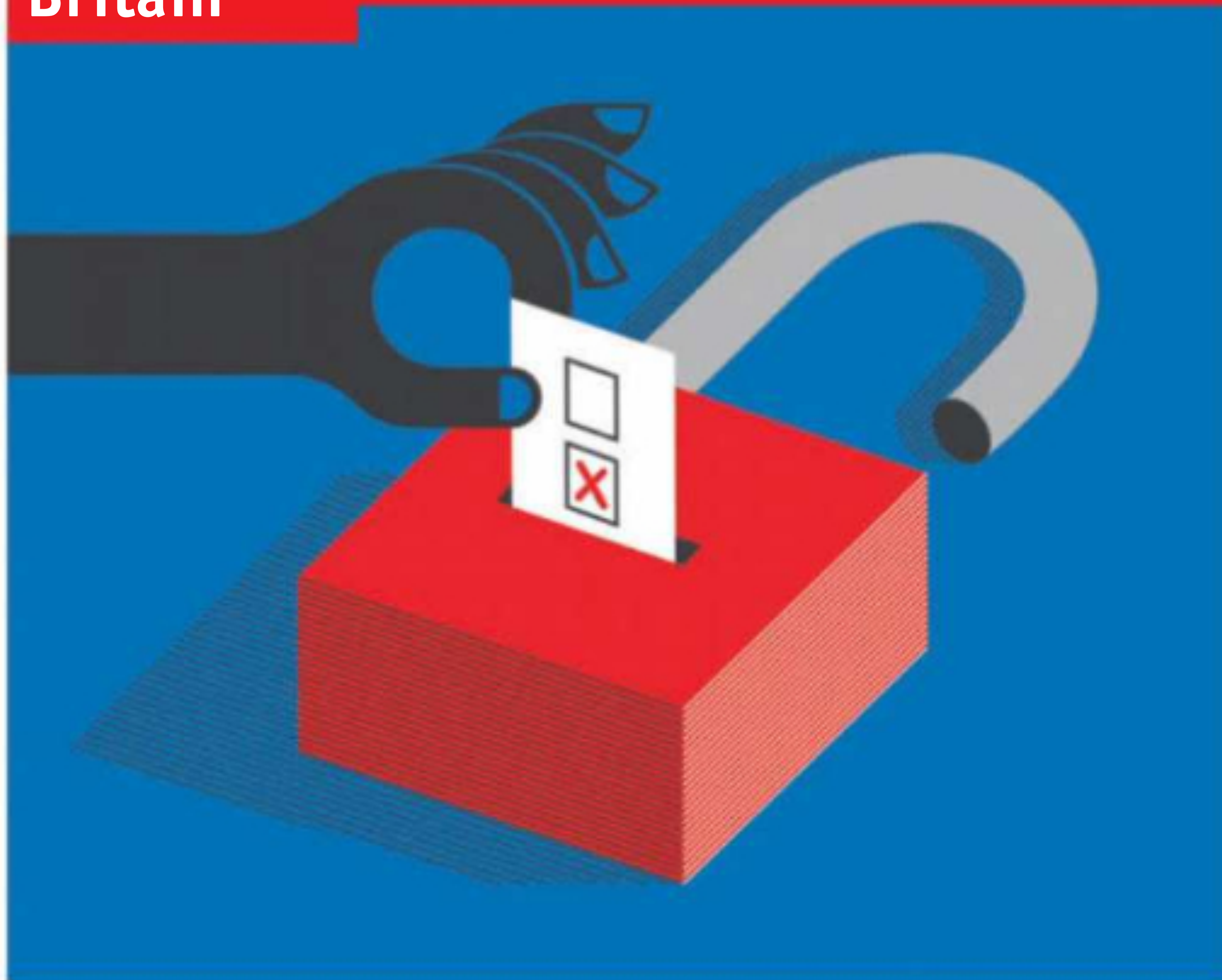
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44 UKIP bounces back

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Another vote on Brexit

Here we go again?

The prospect of parliamentary deadlock has revived talk of a second referendum

SINCE the vote to leave the European Union in June 2016, the more optimistic among those on the losing side have been lobbying for a rematch. Some argue for a re-run on the basis that Brexiteers lied during the campaign and broke election law (on July 17th the Electoral Commission fined the official Vote Leave campaign £61,000, or \$80,000, for deliberately exceeding spending limits). Others say the public deserves a chance to vote on the final deal, which will bear little resemblance to the glittering one they were promised. Yet the idea of a second vote has never taken off. Polls have shifted only slightly in favour of remaining, and there is no great enthusiasm for another plebiscite, which would be the fourth nationwide vote in as many years.

But the idea of revisiting the referendum is back in play. By law, Theresa May's government cannot sign a Brexit deal without MPs' approval. And in the past couple of weeks it has begun to look as if Parliament will reject any deal. The Labour opposition has set six tests for the agreement, which look designed to be unpassable. The Conservative Party, meanwhile, is in a rebellious mood. This week hardline Tory Brexiteers forced the government to toughen its approach to customs, before a faction of Tory Remainers forced it to soft-

en its policy on medical regulation. More defeats were avoided by as few as three votes. It is hard to imagine MPs agreeing to the unappealing deal that Mrs May is likely to bring back from Brussels later this year. And if they don't, Britain could crash out of the EU on March 29th with no deal at all.

Many in Westminster therefore wonder if the only way to break the deadlock may be to send the matter back to the people. One way would be with yet another election. Tory whips reportedly told their MPs that the government would call one over the summer if they defied it on key parts of its Brexit plan. But would Mrs May, election-flunker extraordinaire, risk it? Polls put Labour narrowly ahead of the Tories. In any case, a narrow victory for either party could leave Parliament in the same stalemate, since Labour is also divided over the best approach to Brexit.

So a second referendum is being proposed as a way to get a clear answer. On July 16th Justine Greening, one of Mrs May's former cabinet ministers, proposed a vote with three options: stay in the EU; accept the deal that Mrs May agrees on with Brussels; or leave with no deal.

There are formidable obstacles to such a vote. Parliament would have to legislate for the referendum, which might be tricky if that same Parliament is against the Brexit

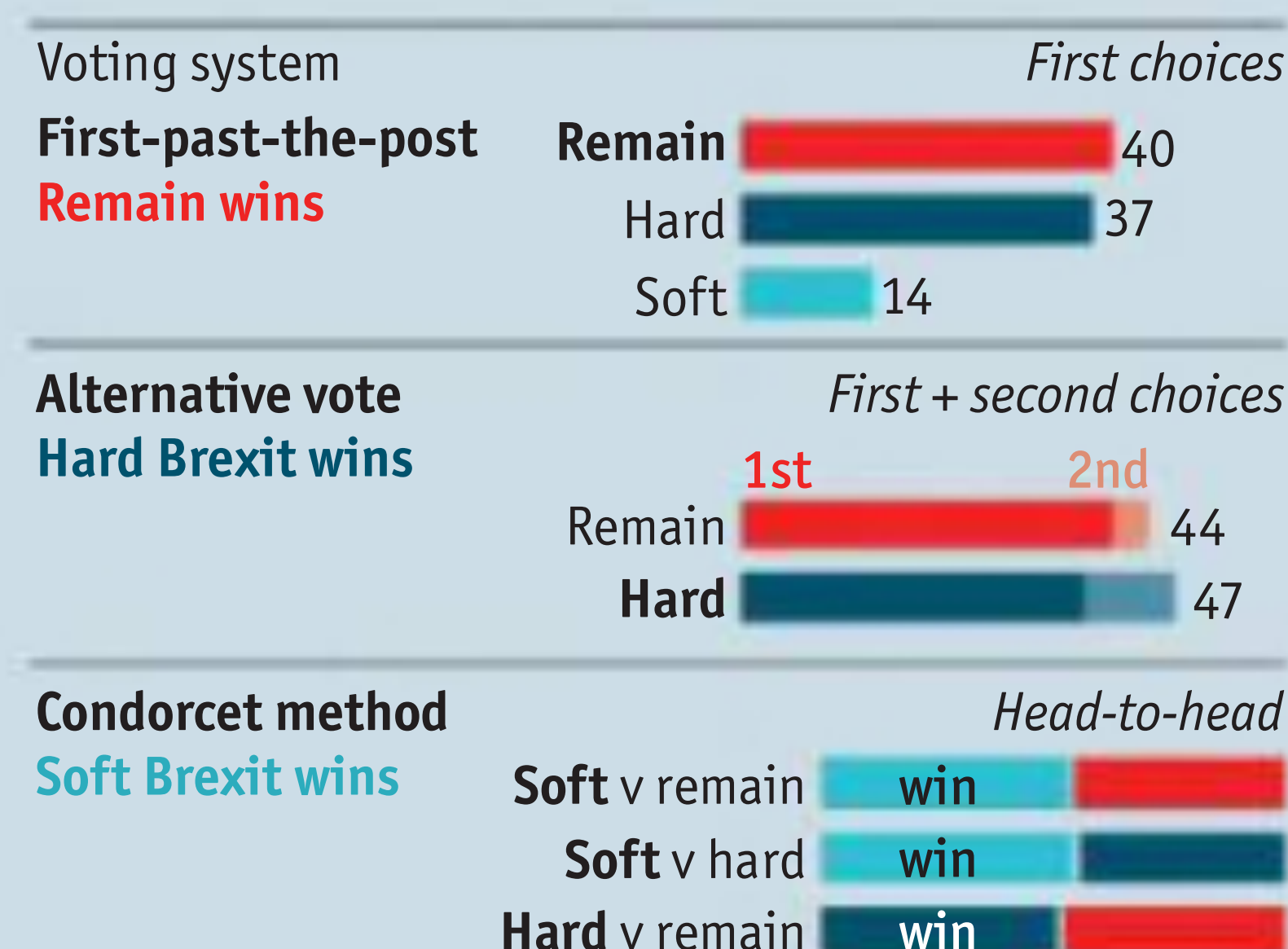
deal that would be its subject. Labour says a referendum is "not its policy" and that MPs should sort out the mess. But it has left the door ajar: "To take [a second referendum] off the table completely, when there might be a set of circumstances where Parliament cannot deliver a meaningful vote, would be a mistake," Tom Watson, Labour's deputy leader, said on July 15th. The Scottish Nationalists would not oppose a second referendum; the Liberal Democrats would vote for one (provided they remembered to show up, as their leader failed to do at a vital Brexit vote this week). Mrs May has ruled out the idea—but of course, two years ago, she ruled out a snap election.

There would be little time to organise a new plebiscite. It took seven months to pass the bill for the original referendum. That process could be speeded up, especially now that Britain has a "here's one I made earlier" template for such a vote, argues Eloise Todd of Best for Britain, which wants a second referendum. But it would almost certainly be necessary for Britain to ask the EU for more time. It would probably agree, believes Charles Grant of the Centre for European Reform, a think-tank, though it would hope to resolve matters before elections to the European Parliament at the end of May.

If all this could be done in time, what would be the question on the ballot? Britain has never had a multiple-choice referendum of the sort that Ms Greening suggests, though they are not unknown internationally. Finns were asked in 1931 if they wanted to scrap prohibition, maintain it, or remove it only for weak drinks (they overwhelmingly chose to abolish it). In 1977 Australians opted for "Advance Australia Fair" as their national song, from a ►►

Everyone's a winner

Britain, polling on EU negotiation preferences
June 8th-10th 2018, % responding



Source: YouGov/The Economist

► line-up of four.

The difficulty is deciding how to pick a winner. Peter Kellner, a polling expert and *Prospect* columnist, notes that a single set of results could produce three possible winners, via first-past-the-post (picking the option with most first-preference votes), alternative vote (adding the second preferences of the bottom-ranked option to the tallies of the top two) or a Condorcet system (picking the overall winner of the three possible head-to-head contests). A poll last month for *The Economist* by YouGov, asking voters to rank hard Brexit, soft Brexit and Remain, returned exactly such a result (see chart). With a second referendum, “there is already potential for a crisis of democratic legitimacy,” notes Akash Paun of the Institute for Government, a think-tank. A complex vote with multiple interpretations would not help.

Such a referendum would also introduce dangers that might make Remainers think twice. One is that the EU would have less incentive to offer a good deal if a referendum was on the cards—indeed, it might have an incentive to offer a bad one, in the hope that Britain would therefore choose to remain, as most Eurocrats would prefer.

It would also be fantastically risky to put “no deal” on the ballot, giving voters an option that no one except the loopy Brexiters supports. Ms Greening calls such an option a “clean break”, a phrase which Malcolm Barr of J.P. Morgan, a bank, describes as “a big misrepresentation”. Trading with the EU on World Trade Organisation terms is one thing. Leaving with no agreement on anything from aviation to citizens’ rights and radioactive materials would be dramatically worse, and not a “clean” break at all.

As the Brussels talks enter their closing phase, Remainers may be excited by the faint prospect of annulling Brexit. Yet the price of this is a corresponding rise in the probability of crashing out of the EU with no agreement. Mrs May has foolishly spent the past two years repeating the bluff, aimed at Brussels, that “no deal is better than a bad deal”. There is a terrible risk that the British public take her at her word. ■

The radical right

Back from a brief 'kip

A populist party bounces back in an altogether nastier form

“RAPE-GANG members are predominantly followers of the cult of Mohammed,” declares the speaker, in a matter-of-fact tone. The crowd gathered on Whitehall boo. “The founder of their cult was himself a paedophile and kept sex slaves,” he continues in a near monotone. MPs are “traitors, collaborators and quislings,” he adds. “They must be swept away.” The language was incendiary, the delivery was prosaic and the messenger was Gerard Batten, the leader of the UK Independence Party.

UKIP is back. After weeks of headlines and government resignations over the Conservatives’ bungled negotiations to leave the European Union, the party that infected British politics with the Brexit virus is on the up. Polls put UKIP at up to 8%, the same as the Liberal Democrats. A narrative of betrayal is driving voters back to UKIP. But they are returning to a very different party to the one they left.

Britain’s radical right is undergoing an evolution. Mr Batten was speaking at a rally demanding the release of Tommy Robinson, the founder of the English Defence League, an Islamophobic protest movement. Mr Robinson was jailed for 13 months in May for contempt of court, after he filmed defendants entering court during a trial that was subject to reporting re-



Far wrong

strictions and broadcast the result to his then 800,000-strong army of Facebook followers. Under Nigel Farage, its previous leader, UKIP built a firewall between the party and the far right. Under current management, the lines between UKIP and its more unpleasant cousins are blurred. Mr Batten has made support for Mr Robinson a key plank of his leadership platform. David Kurten, a member of the London Assembly for UKIP, sums up the party’s evolution: “Nigel was Mr Brexit. Now we are looking at a broader cultural agenda.”

Until now, Britain has been lucky in its radical parties, argues Rob Ford of the University of Manchester. Under Mr Farage, UKIP focused on Brussels and blanched at outright Islamophobia, in contrast to the likes of Geert Wilders in the Netherlands. The relative scarcity of explicit anti-Muslim sentiment in British party politics is down to a want of supply rather than lack of demand. British voters are no more tolerant of Muslims than most of their European peers. Some 42% of Britons say that Islam is fundamentally incompatible with their country’s values, bang on the European median, according to Pew Research. The new UKIP has few qualms about speaking for this large minority.

There is complacency about extremism in British politics. The murder of Jo Cox, a Labour MP, by a neo-Nazi fanatic in 2016, is painted by some MPs as an isolated tragedy. A far-right plot to kill another Labour MP in 2017 attracted surprisingly little attention when it was unearthed. Meanwhile, those on the fringes of political discourse are given reams of coverage. On July 15th Mr Farage used his LBC radio show to broadcast a chummy interview with Stephen Bannon, a former adviser to Donald Trump and godfather to the American alt-right, who argued that Mr Robinson should be released.

Mr Robinson has become a *cause célèbre* for far-right activists across Europe and in America. UKIP is attempting to ride this wave of online support for him. Earlier this summer a gang of YouTubers sympathetic to Mr Robinson publicly joined the party. They include Paul Joseph Watson, a YouTuber with 1.3m subscribers and presenter on the conspiracy website Infowars. For a party that will lose its 18 MEPs when Britain leaves the EU, a new way to generate attention may come in useful.

The arrival of the YouTubers coincided with about 1,000 people joining in June, according to sources in the party. But double that number have joined so far in July, as the government’s Brexit plan has fallen apart. Those who backed UKIP in 2015, when it won 4m votes in the general election, but switched to the Tories in 2017, are returning, says Mike Hookem, a UKIP MEP. People leaving the Conservatives and returning to the UKIP fold may not know quite what they have signed up for. ■



The sexualisation of children

Innocents and experience

TOKYO

In many countries parents and governments are fretting about the premature sexualisation of children. But many ignore the root causes

IN JAPAN it is hard to avoid the disturbing spectacle of young girls being treated as sex objects. *Rorikon*, an abbreviation of “Lolita complex”, is ubiquitous. In M’s Pop Life, a sex shop in Tokyo’s Akihabara district, known for its pop subculture, life-size models of girls, their breasts at various stages of puberty, are openly on sale. Elsewhere big-bosomed cartoon girls are splashed across posters; children (or grown-ups made to look like children) pose in magazines in bikinis.

Rorikon is a peculiarly Japanese phenomenon. But across the world there are growing concerns about children being portrayed sexually, and the effects on the children themselves. This comes in two forms. The first, “direct” sexualisation, includes advertising, television programmes and magazine content that portray children, especially girls, as sexually aware or active. It also includes goods aimed at children who are seen as trying to make themselves “sexier”—such as padded bras or hot-pants, make-up or pole-dancing toys. The second is “indirect”—the worry that, thanks to the internet, children witness ever more depictions of sexual activity. They are likely to see far more pornography than earlier generations, and at a younger age. In Britain, for instance, around half of 11- to 16-year-olds have seen

pornography online, mostly by accident, according to a 2016 study by the NSPCC, a British children’s charity.

Japan has belatedly been reining in some excesses. In 2014 it banned the possession of child pornography—although it is still a hub for making and selling the illegal stuff. Last year the Tokyo metropolitan government banned under-18s from working in the *JK* (*joshi kosei*, schoolgirl) industry, where men pay, for example, to go for a walk with a schoolgirl or to lie down next to one (or, under the new rules, a woman pretending to be one). This year, after a few customer complaints, Aeon, a big retail chain, said it would stop stocking pornographic magazines in some of its shops. But they remain widely on sale in convenience stores. Keiji Goto, a police officer turned children’s-rights lawyer, says “Japan remains behind other countries.”

Don’t grow up

Indeed, across the rich world, countries are grappling with how to deal with the oversexualisation of children. The assumption—often unspoken—is that exposure to sexualised images is linked to a growing number of sexual incidents involving children. Amanda Hulme, the head of a primary school in north-western England, says it is seeing more peer-on-peer abuse.

Across Britain, the police received almost 30,000 reports of sexual assaults by children on other children over the past four years, including 2,625 allegedly on school grounds. And “sexting”—sending explicit images—is widespread. It can ruin young lives. A boy who opens a forwarded sext might find himself on a sex-offenders’ register. A girl whose intimate photo ends up widely shared online may be driven to despair or even suicide.

But it is not known whether all this is really linked to the sexual content children are exposed to. Their youth precludes most research. And Deevia Bhana, a South African academic, says that some of the concern stems from moral attitudes about the way children—almost always girls—should act, rather than from actual evidence of harm. In fact, in some ways risky behaviour is decreasing. Surveys show that in much of the rich world young people are waiting longer to lose their virginity. Teenage pregnancies are falling.

Precocious sexualisation, however, is recognised as causing some forms of harm. One is to mental health. Sharon Lamb, a child psychologist and professor at the University of Massachusetts, Boston, says she sees children, mainly girls, losing self-esteem when they feel that the only way they are valued is if they act sexually. This feeds into problems such as eating disorders, and can affect future relationships. Boys suffer, too. Ms Lamb says stereotypes portraying them as always wanting sex put them under pressure to act in a certain way.

A second possible type of harm is that a sexualised, pornographic culture may give children damaging ideas about sex. Ms Hulme reckons that the increase in children inappropriately touching each other ►►

► is linked to pornography. No one has ever proved how pornography relates to action, but children (more boys than girls) have told pollsters from the NSPCC that it gave them ideas about what to try. This highlights the need for good sex education, if only to inform children about real life.

A third sort would be if such material encouraged paedophilia. Risa Yasojima of M's Pop Life says, without citing evidence, that she reckons its products can help paedophiles refrain from touching actual children. But others fear that ubiquitous images of sexualised children and child pornography foster the paedophile delusion that sees ordinary, spontaneous and tactile children as flirtatious.

Not in front of the children

Efforts to tackle these dangers need to accept that in the internet age it may be possible to limit children's exposure to sexual images, but not to eliminate it. Better to prepare them to be able to cope, and to recognise that the images themselves are a symptom of a broader problem: how society turns women into sexual objects.

In the past decade countries have started to act on worries about the over-sexualisation of children. The turning-point in Britain was a 2010 report on the issue that the government commissioned from Reg Bailey, then at Mothers' Union, a British Christian charity, and now a council member at the Advertising Standards Authority, the industry's self-regulatory body.

Published in 2011, his report made 14 recommendations, such as keeping explicit magazines out of children's sight. It also advocated raising parents' awareness of sales techniques, and developing codes of practice among retailers covering goods marketed to children. Since 2011 guidelines about what can be shown on street billboards and magazine displays have been tightened. Internet-service providers offer parental filters to limit what their children may see. A new law, coming into force this year, obliges pornography sites to require evidence that users are over 18.

Other countries are following suit. In 2014, France outlawed beauty contests for under-13s. La Paz, the capital of Bolivia, has moved to do the same. Some Cubans are fretting about a craze among girls as young as five for *quinceañeras*, coming-of-age parties intended for 15-year-old girls, in which the girls often pose for photos, dolled up and looking sultry. Pressure groups and individual complaints also have an impact. In 2006 Tesco, a British supermarket chain, removed a children's pole-dancing kit from the toys section of its website. In 2010 Primark, an Irish clothing company, withdrew children's bikinis with padded tops.

If driven by online vigilantism alone, however, measures to prevent premature sexualisation may infringe freedom of expression—or simply go too far. In May, after

a storm of online condemnation, Sweaty Betty, a boutique British fitness-wear brand, withdrew from its website an image of three girls around 15 or 16 clad in tropical-patterned leggings and crop-tops, which, in hindsight, looks fairly inoffensive.

Criticism is almost always directed at girls, not at boys or the culture around them. Girls are told not to wear short skirts to school so as not to distract boys, or even teachers—yet not enough is done to teach boys about consent. “I am a bit sick of the simplistic ‘sexy-so-soon’ discourse out there,” says Ms Lamb, the child psychologist. “A girl playing at being Beyoncé isn't harmful. But a society that only values her for being Beyoncé is a problem.”

Research from places such as South Africa and Sweden suggests children can be better at dealing with sexualised advertising than adults realise. Ms Bhana, the South African academic, says her research suggests children are “highly sophisticated consumers”. But children need help to navigate the culture they grow up in. Mr Bailey says too little is done to develop children's resilience to the stuff they inevitably stumble across, especially pornography.

If parents and teachers were matter-of-fact and honest about sex, young people would find it easier to talk about their worries and less likely to let what they see bother them. Research by the NSPCC suggests parents tend not to be too concerned by some things their children do—wearing “sexy” clothes or make-up, for example—seeing children as wanting to grow up quicker than they do. But they do worry about them seeing hard-core pornography.

Britain's Department for Education is in the process of updating its sex-and-relationships guidance for the first time since 2000. Martha Kirby of the NSPCC says this is long overdue. The government is to hold

consultations on new approaches, such as teaching primary-school children about the idea of consent, and those in secondary school about the laws on sexual abuse and the dangers of online grooming by paedophiles.

In many places even basic sex education is lacking. Ms Bhana sees a danger in the extreme positions of some lobbies, especially religious ones, and countries such as Saudi Arabia that resist teaching children about sex at all, in the hope of keeping them “pure”. Religious groups in America, such as the Abstinence Clearinghouse, also argue that sex education encourages children to have sex. In Myanmar similar concerns mean schools barely cover the birds and the bees.

Better to accept that children will naturally want to explore their desires and feelings, and equip them to do so safely with factual information, awareness of online dangers, access to contraception—and the power to know what they want and to say no to what they don't want.

Don't worry, be happy

Countries such as the Netherlands and Denmark are closer to this healthier approach. They expect children to be well informed about their bodies, and see the purpose of sex education as not just to warn of the risks, but to help prepare for a happy sex life. This may be one reason why, according to Anna Sparrman, a professor of child studies at Linköping University in Sweden, Scandinavian countries have not really seen premature-sexualisation panics. It is not because of an anything-goes attitude; Sweden, for example, bans all broadcast advertising aimed at children under 12.

Just as important, countries need to face up to the cultural backdrop behind over-sexualisation, says Michelle Jongenelis, a researcher at Australia's Curtin University. That images of girls looking sexy are so much more prevalent than those of boys reflects sexism and the sexual objectification of women; so does the way much pornography shows women being treated in a degrading manner. Children assimilate these norms through the images of their peers and the products pushed at them—including, at the extreme, pornography.

Happily, this broader cultural context does seem to be under scrutiny in some parts of the world, though the process is at a very early stage. Basic ideas about gender—such as shops labelling baby clothes as “boys” and “girls”—are being challenged, and more nuanced understanding of the meaning of “consent” are gaining ground. The #MeToo debate, which has pushed sexual assault to the fore, leads Ms Jongenelis to conclude that there is a shift in norms about what is acceptable. If so, then children should be among the greatest beneficiaries. ■





Taming tech titans

Antitrust theatre

Despite a global techlash and high fines in Europe, America's online giants have not much to fear from regulators

“THE making of a big tech reckoning,” blared one typical headline earlier this year. “The case for breaking up Amazon, Apple, Facebook and Google,” touted another. Based on media coverage alone it might seem as if the tech titans are in trouble. Add in the news, on July 18th, of a record €4.3bn fine for Google by the European Commission and that impression is strengthened. But if you look hard at where the regulatory rubber is actually hitting the road, the techlash seems much less brutal. Notwithstanding this week's fine—which amounts to just over \$5bn and is the biggest antitrust penalty ever—the online giants are nowhere near being reined in.

To be sure, the mood has changed. In America a survey for Axios, a news website, found that between October and March the favourability ratings of Facebook, Amazon and Google had fallen by 28%, 13% and 12%, respectively. Republicans such as Ted Cruz, a senator, now employ anti-tech rhetoric. Last month the Federal Trade Commission (FTC) announced that it will, starting in September, hold hearings on “competition and consumer protection in the 21st century”.

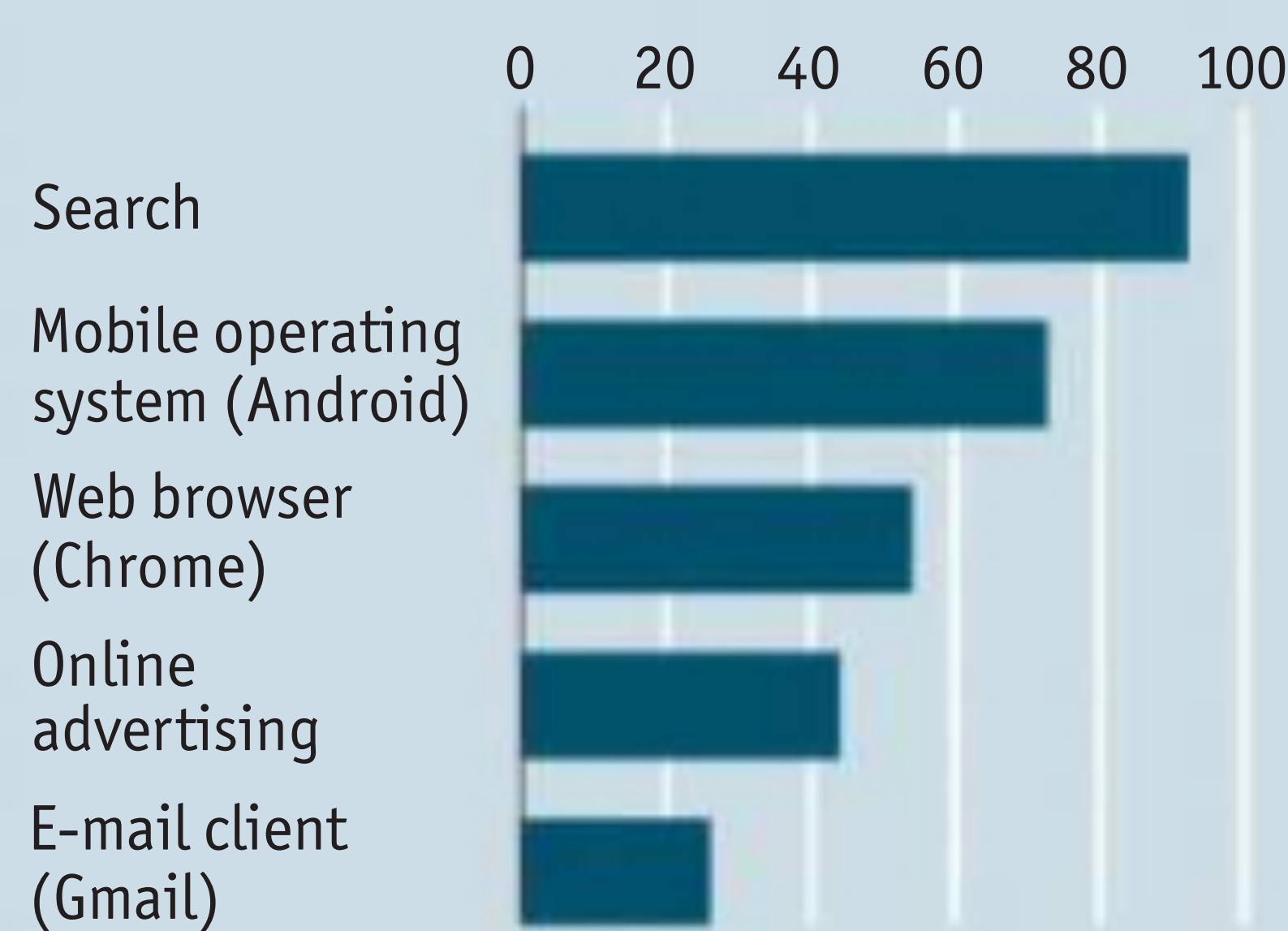
The shift in sentiment started earlier and has gone further in Europe, both because none of the companies have headquarters there and because of the region's sensitivities in regard to privacy and data protection. Google had already battled the commission, and lost, in “the shopping

case”, so called because it involves sites that involve comparison-shopping services. The firm was accused of having discriminated against rivals by downgrading their search results and putting its own on top; last year the commission levied a €2.4bn fine and told Google to treat all comparison-shopping results equally.

The case that led to this week's fine carries even more weight, in part because it echoes another famous battle. The commission says that Google is doing pretty much what Microsoft did in the late 1990s: tying together pieces of software to cement its dominance. This case involves Android, Google's mobile operating system, and all sorts of related software and services, including Google Play, its app store, internet search and a suite of other apps.

One-stop shop

Google, worldwide market share, 2017, %



Sources: Litmus; StatCounter; Statista

Also in this section

48 **Bartleby: Work till you drop**

49 **Nord Stream 2**

49 **Netflix stumbles**

50 **The beauty of vanadium**

51 **Universities rush online**

52 **Schumpeter: Companies and time**

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In essence Google gives smartphone-makers and telecoms operators an all-or-nothing choice: if they want to install any of these programs on their devices, they have to install them all and show the icons in prominent positions. Since firms need at least the app store to make their products commercially viable, they have no choice but to comply. Nor does Google allow them to install competing versions of Android on any of their models. These practices deny “rivals the chance to innovate and compete on the merits” and “consumers the benefits of effective competition,” said Margrethe Vestager, the competition commissioner (pictured above).

Closing arguments

Google has clever ripostes. In the shopping case it argued that it wants to give consumers quick access to relevant information, rather than forcing them to click through to another search engine. Indeed, the commission was widely criticised in that case for failing to show that consumers were denied a superior service as a consequence of Google's actions.

In the Android case the search firm insists that the restrictions are needed to make open-source platforms a success. The needs of everyone who uses them—not just consumers, but developers, device-makers and Google itself—have to be “painstakingly” balanced, in the words of Sundar Pichai, Google's boss, in a blog post published after the commission's ruling. The decision, he said, risks tearing apart this healthy open-source ecosystem by causing Android to fragment into incompatible versions and by making it less profitable for Google to invest in the software.

But the commission is on firmer ground. Being the provider of both internet search and of related services, with substantial market shares across the board (see ►►

► chart on previous page), Google will always have an incentive to discriminate against rival offerings, notes Damien Geraud of Tilburg University. And few will sympathise with Mr Pichai's warning on fragmentation. An open-source ecosystem is tricky to manage, but this does not entitle Google to stymie alternative ecosystems. Rules telling device-makers exactly where to place app icons seem draconian. Their aim, to protect Google's search service from competition, seems clear. And its restrictions have had an impact, for example in the case of Amazon's Fire phones, whose failure owed something to Google.

Yet the commission's remedies still fall far short of reining in Google. In both the shopping and the Android cases, it wants the giant to administer its own poison. "It is Google's responsibility to bring the infringement to an end," Ms Vestager said this week. The rationale is that further fines in case of non-compliance—up to 5% of the average daily worldwide revenue of Alphabet, Google's parent—will lead the firm to do the right thing. Yet Google could well judge that such fines are an acceptable cost of doing business.

Ms Vestager's approach is certainly not working in the shopping case. In Septem-

ber Google opted for a remedy of the sort that her predecessor, Joaquín Almunia, had rejected: auctioning off the slots for comparison-shopping results on its search engine. So far, the new offering has not attracted many bidders, most probably because they are loth to fork over a big part of their already meagre profits. Only about 6% of slots are now filled by rival offers.

At least in the Android case, the remedy seems more straightforward. Google has no choice but to drop the offending restrictions. But given how entrenched its Android ecosystem and most of its apps are, this is unlikely to lead to big changes in the ►►

Bartleby | Work till you drop

Professor Pfeffer fires a fact-filled fusillade

WORK can make you sick and shorten your life. That is the argument of a hard-hitting book* by Jeffrey Pfeffer, a professor at the Stanford Graduate School of Business. In an obvious way, that claim is outdated. Health-and-safety rules help explain why deaths from accidents in American workplaces fell by 65% between 1970 and 2015. But one problem has not gone away: stress. As many as 80% of American workers suffer from high levels of stress in their job, according to a survey entitled "Attitudes in the American Workplace". Nearly half say it is so debilitating that they need help.

Firms are at least aware of the issue. A study in 2008 by Watson Wyatt (a consultancy that is now part of Towers Watson) found that 48% of organisations said job-related stress affected performance. But only 5% of employers said they were doing anything to deal with the matter.

Mr Pfeffer's book focuses on America, where the problem seems particularly acute. One survey found that 55% of employees log into their e-mails after 11pm (in contrast, a new French law gives employees the right to ignore e-mails after their working day has ended); 59% do so on holidays. That is, if they actually take a break at all; more than half of American workers eligible for holiday do not use all the time allotted. All told, Mr Pfeffer calculates that work-related issues may be responsible for as many as 120,000 American deaths a year. A comparison with Europe suggests that around half of those deaths could be eliminated.

One reason for Europe's better record is the provision of universal health care. Mr Pfeffer reckons that the absence of health insurance for all, and its often limited nature where firms do provide it, is the biggest single contributor to America's higher work-related death rate. One sur-

vey estimated that being uninsured increased mortality risk by 25% among working-age adults. Many insured workers have restricted cover. In 2015 a Gallup survey found that almost a third of Americans delayed medical treatment in the previous year owing to the cost. None of this is good for businesses. Workers in poor health are less productive; they also tend to leave work, meaning higher staff turnover.

Mr Pfeffer is also critical of America's work culture, in which firms are quicker than peers elsewhere to shed labour. "Increased employee fear, disengagement and reduced effort frequently swamp any positive direct effects that come from cutting costs by reducing the payroll," he argues. And if unemployment strikes, poor health may well follow. Americans who lose their jobs are 22% more likely to experience a heart attack, after controlling for factors such as smoking, drinking and obesity.

Mr Pfeffer thinks that the growth of the gig economy may make matters worse still. Freelance workers are less likely to have health insurance. They may also suffer higher levels of stress, over their unreliable incomes and irregular hours. Broadly

speaking, jobs that give individuals more autonomy and control increase motivation and also make individuals healthier, Mr Pfeffer writes.

Many will think Mr Pfeffer overstates his case. Some of the problems he describes are rooted in society as a whole, not business in particular. The design of health-care systems is a political choice, rather than a business one. A general rise in unemployment, caused by an economic downturn, is not the fault of individual businesses. The stress for workers of a hire-and-fire culture cuts less deep when unemployment is at record lows, as today. Much as the gig economy spells job insecurity for some, for others it means greater control of their working lives. And some behaviour, such as the unwillingness of Americans to take holidays, is long-standing.

But Mr Pfeffer is right to call attention to the problem of stress, and persuasive that job insecurity and the ubiquity of electronic communication have added to the pressure in the past 20 years. A big change in America's health-care system is unlikely. So the best hope may lie in a change in corporate behaviour.

The author cites firms such as Aetna, an insurance group, and Barry Wehmiller, a manufacturer, which have introduced policies such as wellness programmes and a higher minimum wage, without sacrificing profits. That model worked in the past for Quaker-run British confectionery businesses such as Cadbury and Rowntrees. Mr Pfeffer's book is a powerful argument for looking at it again.



* "Dying for a Paycheck: How Modern Management Harms Employee Health and Company Performance—And What We Can Do About It", published by Harper Business

► mobile industry. To create more competition, the commission would have to demand tougher, more specific remedies. As it is, Google has every incentive to drag out a cycle involving an insufficient remedy followed by fines, meaning that it will take years to have a meaningful impact.

Despite the high fines and theatrical press conferences about antitrust, the commission may end up with not much more to show for its actions than trustbusters in America. There, despite lots of tech-bashing rhetoric, officials have shied away from doing anything of note. That many former Google employees worked in the administration of Barack Obama may have contributed to this inertia, but the real reason is America's forbidding jurisprudence, says William Kovacic of George Washington University, a former FTC chairman. It would be nigh-impossible to get any substantial measures past the courts, which view antitrust interventions suspiciously.

And the barriers to action are getting even higher. In June the Supreme Court backed the policy of American Express, a credit-card issuer, of stopping retailers from nudging customers to use cards with lower transaction fees. Regulators, the majority of the court argued, should look at such two-sided business models more broadly: the firm may charge retailers higher fees but it provides cardholders with lots of rewards. In other words, anti-competitive practices in one market may be acceptable if they lead to consumer benefits in another—an argument that Google will certainly make about Android should it ever end up in an American court. ■

Nord Stream 2

Putin that in your pipe

Russia's pipeline to Germany looks unstoppable

THE Nord Stream 2 (NS2) natural-gas pipeline from Russia to Germany has long been dogged by controversy. But despite several years of transatlantic and intra-European feuding over the €9.5bn (\$11bn) project, it is looking increasingly likely to go ahead. Offshore dredging to lay the pipes has already started near Greifswald in north-eastern Germany. Within just a few weeks, workers will begin laying pipes beneath the Baltic Sea.

In Brussels, meanwhile, experts say the political focus has shifted from preventing NS2 to mitigating its impact on Ukraine, which risks losing its lucrative role as a hub for the transit of Russian gas to Europe. "There is a sense that it is beyond stoppability," says Marco Alverà, boss of Snam,



Spying a Russian captive

Europe's largest pipeline company.

True, the threat of American sanctions still hangs over the consortium backing the project, which comprises Gazprom, the Russian energy giant that is NS2's sole shareholder, and its various financial backers, Uniper and Wintershall of Germany, OMV of Austria, Engie of France and Royal Dutch Shell. America has attempted to target investments in Russian energy to punish the Kremlin over the conflict in eastern Ukraine. (The consortium argues that the project predates the September 2017 starting-point for potential sanctions.)

But President Donald Trump, during his recent visit to Europe, has made sanctions seem less of a worry. Although he initially lambasted Germany for being "captive" to Russia as a result of NS2, Mr Trump later said in front of Vladimir Putin, the Russian president, that he understood where Germany was "coming from". Indeed, he appeared tacitly to accept that NS2 would go ahead by saying that American companies would compete with the pipeline to provide liquefied natural gas (LNG) to Europe.

From a business perspective, this will be good news for some. Increased quantities of relatively cheap Russian gas will help Europe's energy-hungry industrial giants, such as BASF, a German chemical firm, to compete globally with American rivals that benefit from cheap shale gas. The doubling of direct pipeline capacity between Russia and Germany, to 110bn cubic metres, reduces the dependence of German gas distributors on intermediaries in eastern Europe and gives them cheaper gas to resell themselves.

But the project will make it more difficult for LNG, from America or anywhere else, to extend its footing in Europe, because it is cheaper to pipe natural gas than

to liquefy and ship it. That jeopardises energy security in a region whose gas supplies from the Netherlands and the North Sea are dwindling. Russian pipelines supplied 41% of Europe's gas in the first quarter, whereas just 12% came from LNG (of which America provides just 1%). It also undermines Europe's push for clean energy.

Kristine Berzina of the German Marshall Fund, a think-tank, notes that since the *Ostpolitik* of the 1970s, when West Germany took steps towards normalising relations with countries to the east, German firms have felt secure from mischief-making in Moscow. But NS2 will make Europe more dependent on Russia's gas and pipelines at a time when its own supplies are faltering. "This is the better deck of cards that Russia is arranging for itself," she says. "Germany has not woken up to it."

In the shorter term, NS2 could squeeze Ukraine's Naftogaz, which generated \$2.8bn last year from supplying Russian gas further west but suffers regular bullying by Gazprom. Although talks, brokered by the European Union, are taking place between Gazprom and Naftogaz and their respective governments, some fear that if NS2 advances, Russia will need to make fewer assurances of fair play to Ukraine. NS2 is controversial for a reason. ■

Online streaming

Don't look now

Netflix suffers a big share-price wobble

EVEN the most celebrated firms have their hiccups. On July 16th Netflix, an online-streaming giant, presented disappointing news to investors: it had added just 5.2m new subscribers in the second quarter of 2018, well below its projected number of 6.2m. Shares plunged by 14%; they have since recovered some ground.

This most recent bout of volatility may say more about the firm's soothsaying abilities than the strength of its underlying business. Although Netflix's subscriber growth fell short of its own projections, it was still in line with that of past quarters (see chart on next page). In percentage terms, Netflix registered a bigger miss against projected subscriber growth in the second quarter of 2016, when its shares fell by 13%. The firm has also had much bigger forecasting misses on the upside.

When asked this week to explain the forecasting error, Netflix's chief executive, Reed Hastings, responded that the company never worked out what happened in 2016 either, "other than that there is some lumpiness in the business". It is possible ►►

Screen shocker

Netflix

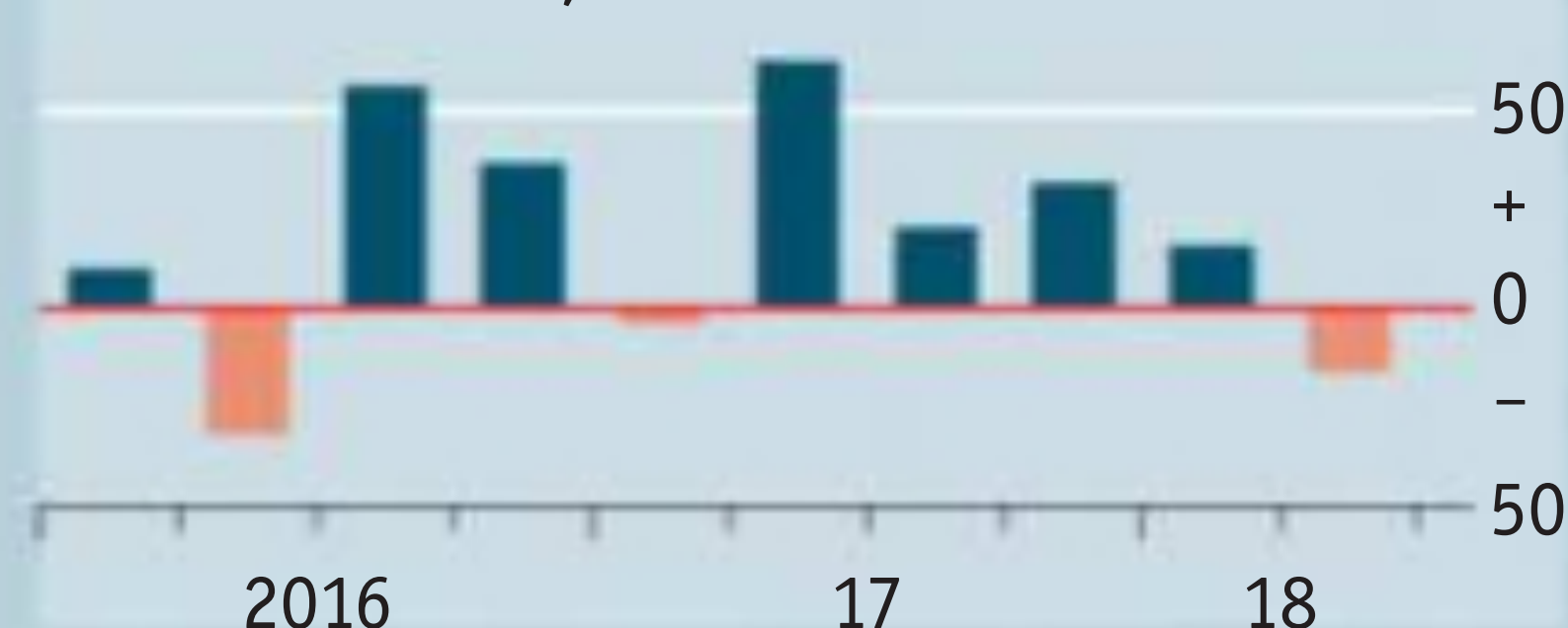
New subscriptions, m

Forecast

Actual



Actual v forecast, %



Source: Company reports

► that subscriber growth fell short of expectations because none of the shows Netflix released last quarter captivated audiences in the way that past hits such as “House of Cards” have. Data from Metacritic, a review-aggregator, show its users gave Netflix shows released in the past quarter an

average score of just 6.4 out of 10, well below the online streamer’s historical average of 7.2.

Markets nonetheless have reason to be jittery about Netflix, if only because it has some of the priciest shares around. The company’s price-earnings ratio sits at around 170, and its annual cashflow is negative to the tune of billions of dollars. The firm’s rise has mostly come on the back of the promise of future growth. It is producing an astonishing amount of content—this year alone, it plans to spend some \$12bn-13bn on it, including 82 original or exclusively licensed feature films and hundreds of television programmes. Warner Brothers, a major Hollywood studio, plans to release just 23 films.

Critics have applauded; over the whole year, Netflix captured 112 award nominations, the first time it has beaten its arch-rival, HBO. Investors will fret that much production has been financed by borrowing. The firm’s long-term debt has risen to \$8.3bn, up from \$2.4bn just two years ago (and equivalent to more than half of Netflix’s total revenue of \$14bn over the past year). Any indication that the firm’s growth rate is slowing causes concern. ■

Vanadium

Beauty and long life

A metal used to harden steel is the latest beneficiary of the battery craze

OPEN a toolbox, pull out a spanner and you may be holding a bit of the answer to global warming: vanadium, a metal named after Vanadis, the Scandinavian goddess of beauty. Used mostly in alloys to strengthen steel, its appearance may not live up to the romance of its name. Yet vanadium could become a vital ingredient in large clean-energy batteries, in which case it will shine a lot brighter.

Its price has already been rising faster than cobalt, copper and nickel, all of which are used in lithium-ion batteries (see chart). The main reason for the run-up is prosaic. About nine-tenths of the world’s vanadium is used to harden steel; China has tightened standards on the strength of rebar to make buildings more earthquake-proof. Mark Smith, boss of Largo Resources, which mines high-purity vanadium in Brazil, says this alone should increase demand for the metal by up to 15,000 tonnes in 2018-19. Last year total production was 83,000 tonnes.

But adding oomph is the incipient demand for vanadium pentoxide, a compound that is used as an electrolyte in vanadium redox flow batteries (VRBs). These

batteries are as big as shipping containers and may be better at storing large amounts of wind and solar energy than stacks of lithium-ion batteries. VRBs house the electrolyte in tanks separate from the battery cell and can be charged and discharged almost inexhaustibly over 20 years (indeed, this gives the electrolyte enough residual value that it can be leased). Some analysts reckon that could make them cost-competitive with their lithium equivalents, and

Charging ahead

Metal prices, January 1st 2017=100, \$ terms



Source: Thomson Reuters



Going with the flow

safer and more scalable to boot.

They currently use only 1-2% of the global vanadium supply, but the potential growth is producing a halo effect on vanadium prices. “The market just thinks VRBs are sexy,” Mr Smith says. Although the flow batteries are too bulky for use in electric vehicles, they may be ideal for stationary storage. China’s National Development and Reform Commission, a state planner, has called for lots of 100 megawatt (MW) VRBs to be built to help manage the fluctuations of wind and solar energy. A 200MW one billed as the world’s most powerful battery is being built in north-eastern China—it is twice the size of a lithium-ion one installed in Australia with much fanfare by Tesla in December.

Some worry that the run-up in vanadium prices will kill VRBs in their infancy. But the metal is abundant; resources total about 63m tonnes. Most of it comes as a by-product from the use of iron in steelmaking, especially in China; some of it is mined in South Africa and Brazil.

The main bottleneck, says Fortune Mojapelo, boss of Bushveld Minerals, a South African vanadium miner, is processing capacity. His firm plans to produce vanadium pentoxide in South Africa to be used in VRBs that Bushveld hopes to erect across Africa. A trend toward vertical integration—from raw material to battery—is also evident in news that VRB Energy, a Canadian flow-battery manufacturer, has set up a long-term agreement with a Chinese electrolyte supplier, Pangang Group Vanadium and Titanium Resources, which may also buy a stake in VRB Energy.

If VRBs are as yet little known, that may be because they lack a flashy promoter, such as Tesla’s Elon Musk. But vanadium has at least two backers with considerable clout. One is Glencore, the world’s biggest commodities trader, which mines it in South Africa. The other is Robert Friedland, a canny billionaire who controls VRB Energy. Both are also leading developers of cobalt. They are betting big on the beauty of batteries. ■

Higher education and the internet

Learning difficulties

A third of America's graduate degrees are now taken online. But the bulk of the spoils go not to famous universities but to obscure firms

“THERE’S only two things you do in the navy,” says Vice-Admiral Al Harms, former commander of the USS Nimitz, a nuclear-powered aircraft carrier that is one of the world’s biggest ships. “You fight, and you train to fight. Hopefully, most of the time you’re training.” The navy got Mr Harms hooked on continuous education, and in his 60s he felt the need for a top-up, so he took the online MBA programme of the University of Illinois (UOI), alongside his son. “I found it a very cool way to learn. You have the self-directed portion, working by yourself, and the enriching portion with class projects.”

When the web started to shake up higher education a decade or more ago, it was widely expected that the Massive Open Online Courses (MOOCs) it spawned would disrupt universities in the same way that digital media undermined newspapers and music firms. But that assumption rested on a misunderstanding of what students are paying for. They are not buying education for its own sake, but rather a certificate from a respected institution.

If the value created in a business is an incumbent’s stamp of approval, it follows that the business will be hard to disrupt. Providers of MOOCs have thus struggled to make much money. What has turned out to be a real business, by contrast, is putting incumbents online. An industry of “online programme managers” (OPMs), who also recruit students, has sprung up. With their help pioneers such as Arizona State University have been followed by big guns like Berkeley, Yale and Harvard, which focus on graduate education.

For universities the internet opens up a vast new market: professionals who can’t leave jobs and families but would like to boost their careers with a master’s, a professional degree or executive education. The wage premiums for a master’s degree and a professional degree over a bachelor’s are 19% and 57% respectively. Technological change also means that knowledge acquired years ago may be out of date. “I wanted to build the skills necessary for the next phase of my career, to remain relevant to my industry and my clients,” says Ann Cleland, a partner in Horne, an accountancy firm, who is taking the Harvard Business Analytics Programme while still leading a disaster-recovery compliance programme in Puerto Rico. For her, as for many, an on-campus course was not an option.

Going digital also frees universities

from the physical constraints of their campus—the UOI has 99 MBA students on campus and 1,750 more enrolled online. UOI’s MBA, at \$22,000, is unusually cheap: most online degrees are at least as costly as, and often more expensive than, on-campus programmes—usually in the \$50,000–100,000 range.

Around a third of graduate education in America is now online, according to Richard Garrett of Eduventures, a consultancy. Many universities take a do-it-yourself approach, but the better-known ones tend to go into partnership with the OPMs. 2U, a ten-year-old startup, led the way, and has been followed into the business by, among others, Pearson, an educational publisher, and Coursera (which started off as a provider of MOOCs). Coursera joined up with UOI to create its online MBA programme.

Ivory power

Investors reckon this looks like a good business opportunity. 2U has a market capitalisation of \$5bn, despite losses of \$29m on revenues of \$287m in 2017. Putting a programme online involves large upfront costs, but the ten-year contracts that 2U signs—it takes almost two-thirds of the revenue from tuition fees—are extremely attractive over the long term. Revenues have risen by over 30% annually for the past three years and according to Chip Paucek, 2U’s chief executive, they will continue to do so for the foreseeable future.

Further opportunities beckon outside America. In the autumn of 2019 University

College London will launch an online MBA in partnership with 2U, and London’s Imperial College will offer an online global public health masters with Coursera. Since announcing the course in March, Imperial has had 10,000 expressions of interest from 170 countries for 75 places.

Some think the OPM business is a bit too good, and that universities are giving up too much revenue. John Katzman, who founded 2U and left it in 2012, explains that he came to feel that the company, like other OPMs, had tilted towards shareholders and away from students. Full-service OPMs, he says, are too expensive. Better tech means it now costs \$2m–3m to put a programme online, against \$10m–15m when he started, but the revenue split has hardly shifted. That won’t last, says Mr Katzman, who has founded a budget option—Noodle Partners, which offers deals based on a fee as well as a revenue split. “As students understand they’re paying for Wall Street profits, as faculty understand that their work is just fuelling the next billion dollars of market cap, I will end up eating the OPMs’ lunch,” he says.

Such criticisms chime with broad concerns about for-profit education, but 2U’s Mr Paucek is unmoved. “It’s not going into Wall Street pockets. It’s going into a long-term engine of social mobility.” He has never lost a customer, he says.

Nonetheless, 2U’s numbers will encourage competition. OPMs are proliferating, just as student-recruitment costs are rising. “Student-acquisition costs have been going up,” says Iwan Streichenberger, president of Pearson Online Learning Services, “because of the premiums that Google and Facebook are charging.” Along with LinkedIn, these are the main marketing channels. Over time universities will surely try to take a larger slice of revenues themselves. It doesn’t take a master’s degree to work out what these developments will do to the OPMs’ margins. ■



Schumpeter | A minute of your day

How companies should think about the future



TIME is one of the most disputed and confusing subjects in business. Schumpeter is writing this column after attending a conference which began with experts describing a new era of exponential technological change. It ended with a guru who had studied 70,000 years of history and who confidently discussed humanity's fate over the 21st century (it does not look good). In the sessions in between, specialists discussed Asia's outlook in 2030—though they struggled to cope with Asia in 2018, starting 68 minutes behind schedule, a daily lag which, if maintained across the intervening period, would mean the fourth decade of the century would begin seven months late.

In business well-established frameworks exist for everything from corporate finance to supply chains and human resources. Time is more slippery. Should firms act now or later? Quickly or slowly? There are no clear rules. In a state-led economy the government controls the future to some extent, setting laws and allocating resources in order to fulfil a vision, as China hopes to with its “Made in 2025” plan for advanced-technology industries. But in a market economy there is no grand plan, just the individual decisions of thousands of firms competing in a spontaneous process, which Joseph Schumpeter likened to a gale.

A handful of cutting-edge firms are expressly designed to be bold bets on how societies will function at a distant future point; think of Tesla in electric vehicles or NVIDIA in advanced semiconductors. But few businesses are as focused or as novel as these. Faced with the fog of time, the majority resort to one of two popular approaches—they either lionise the “long term” or follow big, futuristic “mega-trends”. Neither are very satisfactory.

Consider the idea that firms should aim for the long term. In June Jamie Dimon, the boss of JPMorgan Chase, a bank, and Warren Buffett, a venerated investor, criticised what they view as the stockmarket's obsession with quarterly earnings guidance. But it is far from clear whether most firms are really run to hit quarterly targets. Only 28% of companies in the S&P 500 issue guidance. And when bosses are liberated to act for the long term they often stumble about in the dark. Rather than displaying prescience, the impulse of many executives is to follow the herd, with debt levels and acquisition activity typically rising at the peak of the economic and stockmarket cycles.

Even if firms can see into the long term, they must also juggle several time cycles. Rather as banks raise overnight deposits and make long-term loans, companies mediate claims and commitments of wildly different durations. The information cycle is instant. The average firm in the S&P 500 carries 47 days of inventory. Budgets and tax filings are annual. Workers stay in their jobs for years. The expected life of the assets of a typical S&P 500 company is 14 years, and about 50% of its market value derives from its expected profits after 2027. Product cycles can last for decades: PCs boomed in the 1990s, for example, and did not face a big threat until 2007, when the iPhone was launched.

The most common alternative to long-termism is to try to identify “mega-trends” and build a strategy around them. Some are fairly safe bets. India will consume more energy in the future. Digital payments will become ubiquitous. The usual problem is that everyone else has already spotted the same trends. Capital pours into the opportunity, pushing down returns. One example is the frenzy over commodities and emerging markets in 2004-10. Many multinationals lost their shirts on expensive acquisitions and greenfield projects in saturated markets. Today's red-hot mega-trends are big data and artificial intelligence. While these phenomena are real, their returns will probably be in inverse proportion to their fashionability.

Lionising the long term and chasing mega-trends can thus both be traps. A more pragmatic, nuanced approach makes better sense. The first step is to maintain a balance between different time horizons. It is no good brilliantly predicting consumer behaviour in 2027 if you misjudge counterparty risk today. And it is a hollow victory to beat expectations for one quarter's results if your main patents expire the following month.

Second, it is essential to have “optionality”, or plenty of irons in the fire. In hindsight it is tempting to assume that a successful firm's triumph was guaranteed. But this is not the case. Amazon has had flops (its Fire phone and expansion in China) even as it got the future right with its big bets on cloud computing and the Kindle. Options are expensive to maintain since they often burn cash. So the best firms mitigate this by providing consistent performance in their “core” businesses in the here and now.

Last, because events in the outside world are so hard to predict, it pays to look inward. Culture is a squidgy concept, but successful firms need people who are adaptable but self-confident enough not to be swung too much by fashion, as well as balance-sheets that are strong enough to absorb mistakes. Goldman Sachs has made a poor strategic choice over the past half-decade, by refusing to shrink its misfiring bond-trading division. But it still attracts and retains brainy, ambitious people and is well capitalised, which should give it a decent shot at revival under its new chief executive, David Solomon (see Finance section).

Tick tock

The history of business is often told through inspirational stories about destiny being fulfilled. Occasionally these paint an accurate picture. Andrew Carnegie foresaw that America would need an integrated national market for steel by the late 19th century. Steve Jobs had a vision of how smart devices would change the world and set about inventing them. But for most companies, especially ones in mature economies, facing the future is far more prosaic. Balance, optionality and poise matter more than an overwhelming conviction about the world in two decades hence. Too much emphasis on the distant future is a waste of time. ■



The European Central Bank

Succession planning

Mario Draghi's replacement will be chosen after much political haggling

A LOT rests on the shoulders of the euro zone's top central banker. The president of the European Central Bank (ECB) is not just in charge of ensuring monetary and financial stability in one of the world's largest economies. In the absence of a single European fiscal authority, it also falls to the ECB to act as a backstop for the currency bloc. In times of crisis, the very survival of the monetary union seems to depend on the president's words and actions. Central-bank bosses in America, Japan or Britain bear no burden as great.

With such demands, though, comes great influence. Those in need of convincing need only cast their minds back to July 2012. Greek interest rates were soaring and investors were entertaining the possibility that the euro zone would break up. But Mario Draghi, the ECB's boss, soothed markets with a promise to do "whatever it takes" to save the euro. Six years on, that commitment still helps to contain Italy's sovereign-bond yields, despite unease about its new government's economic policies.

Mr Draghi's term does not end until October 2019. But the jostling to replace him has already started. His successor will be chosen after much horse-trading between the 19 euro-zone members. By comparison, last year's choice of Jerome Powell to lead America's Federal Reserve looks a breeze.

Political jockeying has been a feature of the ECB's presidency ever since it was set up 20 years ago. Its mandate followed that of the German Bundesbank in enshrining price stability and independence. Even so the Germans, doubtful of southerners' commitment to low inflation, insisted on Wim Duisenberg, a Dutchman they saw as a kindred spirit, as president. The French wanted one of their own. The fudge was that Mr Duisenberg would step down halfway through his term to make way for Jean-Claude Trichet, a Frenchman who was Mr Draghi's predecessor.

Complicating the negotiations over the next presidency is the fact that other big jobs are at stake, too. Vacancies at the top of the European Commission and European Council will also open up next year. And there are other spots at the bank that need filling. This week it began its search for a chief bank supervisor to replace Danièle Nouy, a Frenchwoman. Peter Praet, a Belgian member of the bank's executive board, will leave in May.

Member states need to decide which roles they want and what to concede to get them. At the ECB, a balance between northerners and southerners is considered essential. The choice in March of Luis de Guindos, a Spaniard, as its vice-president, for example, is thought to leave the field

Also in this section

54 Buttonwood: A trunkful of bolívares

55 Goldman Sachs's new boss

55 Football transfers

56 China's economic squabbles

57 Income-share agreements

58 Free exchange: Ballot or wallet?

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open for a northern president.

With the euro area's largest and most populous economy yet to hold the post, most observers agree that it is Germany's turn. The obvious candidate would be the boss of the Bundesbank, Jens Weidmann. A survey last month of economists by Bloomberg, a news agency, put him as the most likely choice.

But the job is not in the bag. An advocate of a minimalist role for the ECB, Mr Weidmann has often been in the dissenting minority on big policy decisions. In 2013 he testified in Germany's constitutional court against the bond-purchase scheme that gave substance to Mr Draghi's promise to save the euro. Some reckon he has toned down his criticism of the bank recently, perhaps to position himself for the top job. Even so, he is unlikely to have many southern European supporters. Insiders also wonder if he is too orthodox to dream up unconventional solutions in a crisis.

Political capital

Angela Merkel, Germany's chancellor, could probably ensure his elevation. But other countries' leaders would demand big concessions in return. And she may not, after the past difficult decade, see much to gain from having a German at the bank's helm. Teutonic zeal for price stability and fiscal discipline has not been popular in crisis-stricken countries. It might be safer to back a candidate from another northern European country, who shares German views but is less divisive.

Erkki Liikanen, the boss of Finland's central bank, is moderately hawkish and seen in Frankfurt as a constructive contributor to policy debates. Though he is 67 and stepped down from the Bank of Finland ►►

► this month, he has reportedly said that he would consider the ECB role. His successor, Olli Rehn, could also be in the running, as could Klaas Knot, the boss of the Dutch National Bank. Philip Lane, who heads Ireland's central bank and has an impressive academic background, is widely considered the front-runner to replace Mr Praet.

The twists and turns of backroom deals mean that a "grand bargain" between Germany and France encompassing other top EU jobs could yet put a Frenchman at the top again. François Villeroy de Galhau, the governor of France's central bank, is thought to have good relations with Em-

manuel Macron, the president. Another runner could be Benoît Coeuré, who is already on the ECB's board. Though he is well-regarded, his promotion would depend on lawyers finding a way round rules that seem to ban repeat terms.

A surprise cannot be ruled out. Mr Draghi, an Italian, was appointed after a German, Axel Weber, dropped out of the race; he was chosen even though another southerner, Vítor Constâncio, was vice-president. But the risk is that the successful candidate is the least objectionable, rather than the ablest. That would damage the ECB's hard-won credibility.

The fallout from such an intensely political selection process could start to be felt even before Mr Draghi departs. As asset purchases wind down, the ECB's main policy tool is its guidance on interest rates. It expects rates to stay unchanged "at least through the summer of 2019". But uncertainty over Mr Draghi's successor could undermine that guidance, says Huw Pill of Goldman Sachs, an investment bank. It could even shake confidence in the bank's willingness to act in another crisis. As the euro zone's leaders gear up for the horse-trading, they would do well to consider the impact on the markets. ■

Buttonwood | A trunkful of bolívares

How Venezuelans preserve their savings from hyperinflation—and the lessons for everyone else

ASK the chief investment officer of a fund-management firm how to spread your investments and you will be told to put so much in stocks, so much in bonds and something in hedge funds or private equity. Chances are that white-elephant buildings, eggs and long-life milk will not feature. But in Venezuela, where the inflation rate is in the tens of thousands, things that people elsewhere would shun for fear they will lose value have become stores of real wealth.

That is why you can see scaffolding and other signs of a building boom dotted around Caracas, the capital of a country that has endured an economic collapse. Businesses need to park their earnings where they will not be wiped out by inflation. A smaller-scale response to galloping prices is the emerging "egg economy". Eggs hold their value better than cash, for a while at least. They make for a convenient currency, too. It is easier to carry around a half-dozen eggs than a trunkful of banknotes. And many tradespeople would be happier to receive the eggs.

There are plenty of lessons from Venezuela's calamity, including for ordinary savers. An often-overlooked one concerns personal finances. In stable countries, the penalty for a careless approach to saving can hit you a long way in the future. It might be the drawn-out misery of a meagre income in retirement, say. In Venezuela bad decisions lead to ruin—and rather quickly. Keeping your head above water takes great care. A sure way to go under is to keep money in bolívares for any longer than it takes to buy essentials.

Episodes of hyperinflation are quite rare. Steve Hanke of Johns Hopkins University lists 57 cases, starting with France in the 1790s. It takes something extraordinary—war, revolution or epic incompetence—to mess things up on such a scale.



The root cause is usually a chronic weakness in public finances. This might be because of looting by officials, lavish welfare spending or reliance on a single source of tax revenue. The government resorts to printing money to pay its bills. That feeds inflation. A vicious cycle ensures that it rises quickly. Because taxes are paid some time after the activity they relate to, rapid inflation erodes the value of tax receipts. More money is created to fill the gap in revenue. Inflation accelerates. The cycle turns.

They are the egg men

Venezuela fits this template, more or less. Its people were not completely unprepared. High inflation in the 1980s and 1990s taught the middle classes to keep a chunk of their savings offshore in dollar accounts. The financially astute switch between accounts in Miami and Caracas. But capital controls make it tricky to transfer large sums. Other inflation hedges are needed.

One is property. When protests against Nicolás Maduro, the autocratic president, were at their height last year, some foreigners hoped to snap up homes at fire-sale prices. But there were no bargains. Proper-

ty was too valuable as an inflation hedge. For a while, a car was as much a savings vehicle as a way to get from A to B. It was once possible to sell one for more than the purchase price in dollars. But cars have become less of a sellers' market as people leave Venezuela and sell their belongings. Property prices, too, have stabilised in dollar terms. A shrewd minority are using the stockmarket as a sort of inflation-linked bank, buying shares to deposit cash and selling them to withdraw it. A favoured stock is Banco Mercantil, which has businesses outside Venezuela.

It is impossible to guard against extreme inflation with precision. For many it is hard to guard against it at all. The poor have few ways to do so. In this regard, what happens in Venezuela tallies with what happens elsewhere. A newish strain in academic finance examines how ordinary people manage their money. A survey of the literature* by Cristian Badarinza, John Campbell and Tarun Ramadorai sums up what has been learned so far. A key finding is that the wealthy and educated make fewer mistakes with their money. They invest in a broader range of assets, pay lower fees and are quicker to refinance their debts when interest rates change. The penalty the poor pay for their comparative lack of financial acumen is real, if not always visible.

The costs are more obvious in Venezuela. It thus provides a vivid lesson in why ordinary folk should pay closer attention to how they manage their money. Even quite small changes can make a big difference to long-term returns. To Venezuelans such wisdom is essential, because when you are coping with hyperinflation, the long term is next week.

* "International Comparative Household Finance", NBER Working Paper 22066, March 2016

Goldman Sachs

White smoke over West Street

NEW YORK

A new boss for a grand franchise

LAME-DUCK periods can last for only so long. It was clear beforehand that a Goldman Sachs earnings call this week would be packed with questions about succession. When would the chief executive, Lloyd Blankfein, step down? (He had said in March he was leaving, but gave no date.) What would his departure mean for the firm's other over-achievers? Several had already decamped, including Harvey Schwartz, the bank's co-president and co-chief operating officer. Left as heir-apparent was the man he had shared both jobs with, David Solomon, but with no hint of when his elevation would take place.

On July 17th Goldman ended the speculation by confirming the choice of Mr Solomon as CEO and saying that he would take over in October, earlier than predicted. Quarterly results presented that day by Martin Chavez, the chief financial officer, who is thought to be in his own succession battle to replace Mr Solomon, beat forecasts. Still, the share price sagged. Analysts cited fears about whether low figures for compensation, and profits from investments and lending, could be sustained. Investors may also have been left wondering what the new management line-up means for Goldman. Bucking the practice among big banks to have their bosses on the line during earnings announcements, neither Mr Solomon nor Mr Blankfein found time to make their way to the phone. Mike Mayo, an analyst at Wells Fargo, voiced a

common reaction in a report entitled "Why no new CEO on the call?"

The awkward announcement was an appropriate coda to the Blankfein era. He became chief executive of what was widely regarded as the pre-eminent financial firm in 2006, months after Jamie Dimon was appointed to the top job at JPMorgan Chase, which then looked less steady. Mr Dimon has since steered his firm to a position of strength; by contrast, Goldman has too often seemed close to faltering.

Though Goldman did well during the financial crisis, that sometimes seemed attributable not to skill alone but also to timely interventions by a government that included former Goldman employees. The firm's political connections and machinations—whether real or merely imagined—earned it the sobriquet "vampire squid" from *Rolling Stone* magazine. That tickled not only the Occupy Wall Street crowd, but the Wall Street crowd. Many of Goldman's competitors adopted it with glee.

The post-crisis era was not as controversial for Goldman, but it was not as successful either. Its share price has lagged behind those of Morgan Stanley, Bank of America, and JPMorgan Chase in the past five years. Part of the blame lay with the declining profitability of fixed-income trading, the once-lucrative, somewhat mysterious operation that had propelled Mr Blankfein to the top job. Investment banking prospered; and in 2016 Goldman started an innovative digital retail bank, Marcus. But in other respects the firm was slow to adapt to changing circumstances.

That fed persistent rumours that Mr Blankfein was on his way out. But results were never truly dire and his humorous, self-effacing style won him fans, not only among employees but among clients and in government. A wistful note sent out after the announcement to employees was hardly an enthusiastic take on retirement. "Today, I don't want to retire from Goldman Sachs, but by my own perhaps convoluted logic, it feels like the right time."

His successor came to Goldman the long way round. Early stops included three major financial firms: Irving Trust, Drexel Burnham Lambert and Bear Stearns. None still exists. Irving was bought in 1988 and the other two went bankrupt—each no doubt leaving its scars. At Goldman Mr Solomon has moved up through investment banking, not as a polished salesman but as a tough manager. He is expected to centralise authority that has been dispersed among a large management committee.

Much is being made of the new man's hobby: spinning discs under the stage name, DJ D-Sol. This is taken by some to suggest that he is interesting, young at heart and perhaps even cool, none of which remotely matters. But it may represent something important: a boss who likes people to dance to his tune. ■



Songs of Solomon

Football transfers

Winning moves

Talent scouts are paying less attention to the World Cup

CHEERS erupted from Calais to Cannes when Kylian Mbappé, a 19-year-old striker, thumped in France's fourth goal in the World Cup final on July 15th. Among the smuggest onlookers were the accountants at Paris Saint-Germain, Mr Mbappé's club. He was already a prized asset before the tournament, having broken the record for goals scored by a teenager in the Champions League, Europe's premier-club competition. CIES Football Observatory, a research organisation, reckoned then that his club could charge €190m (\$223m) for him. But an electrifying World Cup, with four goals, has surely increased his value.

That, at least, is how the transfer market usually responds to international tournaments. According to 21st Club, a consultancy, each time a player found the net in the World Cup and European Championship tournaments in 2004-16, his price went up by, on average, 13%. After the 2014 World Cup James Rodríguez, whose six goals for Colombia made him the top scorer, earned a reported €80m move to Real Madrid. That was twice what 21st Club estimated he was worth from his career record.

The club soon realised it had overpaid. Mr Rodríguez struggled, and ended up loaned to Bayern Munich. Indeed 21st Club has found that though a footballer's goals for his club in the previous season predict his future impact, those at an international tournament do not. That should not be surprising. A World Cup lasts five weeks and features plenty of mismatched teams; a domestic season is eight months of tough games. Mr Mbappé's four World Cup goals are a less useful indicator than the 47 he scored in his two most recent club seasons.

Could Mr Mbappé net a spectacular ►►

Buyer beware

Highest goal-scorer at major football tournaments* who subsequently transferred, €m





Making a Kylian

► transfer? He says he is not thinking of moving and earlier this month Real Madrid denied rumours that it had made a bid. Even so, speculation continues. Bookmakers give the club about a one-in-four chance of luring Mr Mbappé from Paris. Otherwise, the transfer market seems flat. Russia's Aleksandr Golovin is the only surprise World Cup star close to moving—and his rumoured transfer to Chelsea may owe more to the patriotism of Roman Abramovich, the club's Russian owner, than to its scouting department.

For most of football's history, scouts relied on hearsay for foreign transfers. In 1996 Southampton, an English team, signed someone claiming to be the cousin of George Weah, Africa's biggest star. After his dreadful debut, the club discovered he had barely played professionally. An international tournament at least offered a chance to see potential imports play.

Today's scouts, however, have access to footage and statistics from every league in the world. Raffaele Poli, the head of CIES Football Observatory, says an influx of staff from financial firms has led to greater interest in big data. In 2012 Arsenal purchased StatDNA, an American analytics firm. Both Bayern Munich and Manchester City have worked with SAP, a software company that provided insights for Germany's World Cup winners in 2014.

The result, says Mr Poli, is an increasingly rational market. A full 80% of the differences between transfer fees for players can be accounted for by variables that CIES uses in its model, with only a few prices raising eyebrows. It reckoned Cristiano Ronaldo, sold earlier this month by Real Madrid to Juventus for €112m, was worth €103m. Real Madrid could easily bid three times that for Mr Mbappé. But it would probably be overpaying. ■

China's economy

Jostling eunuchs

SHANGHAI

A rare public spat between officials as debt pressures build

LIKE other countries, China has bureaucratic infighting. But it does better than most at keeping tussles hidden from outside view, especially under Xi Jinping, a president who brooks no dissent. So it has been highly unusual to see a spat between the central bank and finance ministry spill into the open. It reveals cracks in the government's façade of unity as a campaign to control debt exacts a toll on the economy.

The disagreement started on July 13th when Xu Zhong, head of the central bank's research department, spoke at a forum in Beijing. Officially, China is committed to a "proactive fiscal policy", meaning that the government will spend to prop up growth. But Mr Xu argued that the finance ministry was not delivering what it had promised, thus making deleveraging more painful.

China, he noted, is aiming for a 2.6% deficit in 2018, tighter than last year's 3%. What's more, many companies face rising taxes despite pledges of tax cuts. As evidence, he pointed out that fiscal revenues are growing more quickly than GDP (see chart). The finance ministry was "acting indecently". Compared with politics in the West, that might sound rather mild. But for China, it was a harsh public rebuke. Mr Xu's words spread quickly online.

The rebuttal came on July 16th on the website of *Caixin*, a respected financial magazine, written under a pseudonym, Qingchi. The author claimed to be a finance official; the article's detail lent credibility to that claim. Qingchi started with a clarification: focusing on the deficit is simplistic, because the government has other tools, such as the budgets of state-owned firms, to support growth. Fiscal policy is stronger and more co-ordinated, Qingchi asserted, than it used to be.

Taxing times

China, % increase on a year earlier



Source: Wind Info

*Four-quarter moving average

The argument then took a nastier turn. Mr Xu had faulted the finance ministry for its hand in China's debt mess, saying it was pushing the problem onto banks rather than fixing the fiscal system. Qingchi countered that financial institutions have been accomplices, structuring complex loans for local governments. All the while, Qingchi wrote, the central bank has moved too slowly in liberalising interest rates, which would have bolstered market discipline. Hence the most cutting line of the rebuttal: "officials act as if they were managing a small country's central bank."

It is not the first time that the central bank and the finance ministry have been at loggerheads. In 2007 the central bank lost a battle for Huijin, a vehicle that holds stakes in China's main commercial lenders. The sovereign-wealth fund, under the finance ministry, took control. But that was a mere turf battle, and was waged behind closed doors.

The dispute of the past week cuts to the heart of economic policy. Both authors said they were expressing personal opinions, but their articles underscored China's conundrums. The economy has held up well, growing by 6.7% year on year in the second quarter. But decelerations in credit and investment suggest that a sharper slowdown lies ahead. The trade war with America only adds to the headwinds.

The deleveraging campaign is also starting to claim more victims. China had a record number of bond defaults in the first half of the year. Stocks are in a bear market, down by more than 20% since January. No regulator wants to take the blame for this distress. Tough new asset-management rules have been delayed as a result. But at the same time no regulator wants to be seen as the one that gives up on the fight against debt. Better to pass the buck.

Institutionally, the debate is intriguing. Neither the central bank nor the finance ministry is independent; each answers to the State Council, China's cabinet. Larry Hu, an economist with Macquarie Securities, says the solution must come from a higher level. These days, that is a euphemism for Mr Xi and his senior advisers.

One concern about Mr Xi is that he is stifling debate. In that respect, it might be seen as heartening for the central bank and the finance ministry to battle it out. But as the dispute breaks into the open it raises another fear—that internal channels have become blocked, at a delicate time. ■



Income-share agreements

Higher returns

Universities are working with investors to offer a different approach to tuition fees

TO PAY for his professional flight degree at Purdue University in Indiana, Andrew Hoyler had two choices. He could rely on loans and scholarships. Or he could cover some of the cost with an “income-share agreement” (ISA), a contract with Purdue to pay it a percentage of his earnings for a fixed period after graduation.

Salaries for new pilots are low. Mr Hoyler made \$1,900 per month in his first year of work. Without the ISA, monthly loan payments would have been more than \$1,300. Instead, for the next eight-and-a-half years he will pay 7.83% of his income. He thinks that, as his pay accelerates, he will end up paying \$300-400 more each month than with a loan. But low early payments, and the certainty that they would stay low if his earnings did, made an ISA the better option, he says. “I’ve been able to pay what I could afford.”

Most American students take out low-interest, federally backed loans, the stock of which has grown steeply in recent years (see chart). Balances are usually written off after 20 years. That is the only insurance built into most students’ debt. Though repayments can be linked to future income, only 29% of borrowers opt for this. And total loans are generally capped at \$31,000. In 2016-17, 6% of undergraduates topped up with private loans, which have higher interest rates and no debt forgiveness.

ISAs, by contrast, act as equity, not debt, with investors taking a share in a future income stream. Risk is shifted from students to investors, who can pool and diversify it. Graduates who fail to land steady or lucrative work will pay less than the cost of their

tuition. Caps on repayment mean high-fliers do not end up paying back fortunes. ISAs also align the interests of borrower and lender, since investor returns are tied to a student’s career progress. Investors will offer better terms to students at universities whose graduates earn well.

ISAs have been mooted before as a way to spare American graduates from mountains of debt. In 2014 bills were introduced in Congress that would have put them on a firm legal footing—setting maximum loan terms, for example, and ruling that, like ordinary student debt, they would not be dischargeable by declaring bankruptcy. One firm, Upstart, briefly marketed them directly to consumers. But the bills went nowhere and the idea fizzled.

Similar proposals are once more being considered in Congress, but that is not the main reason why ISAs are attracting attention again. What has put them back on the

agenda is the involvement of universities, which are starting to offer ISAs through their financial-aid offices, with outside investors providing some of the capital. Universities spy a way to lower their students’ debt burden and spare them from having to take out private loans. Investors regard this as a sign that an institution is confident in its graduates’ earning power, which reassures them about the extra risk in an equity arrangement, compared with conventional student debt.

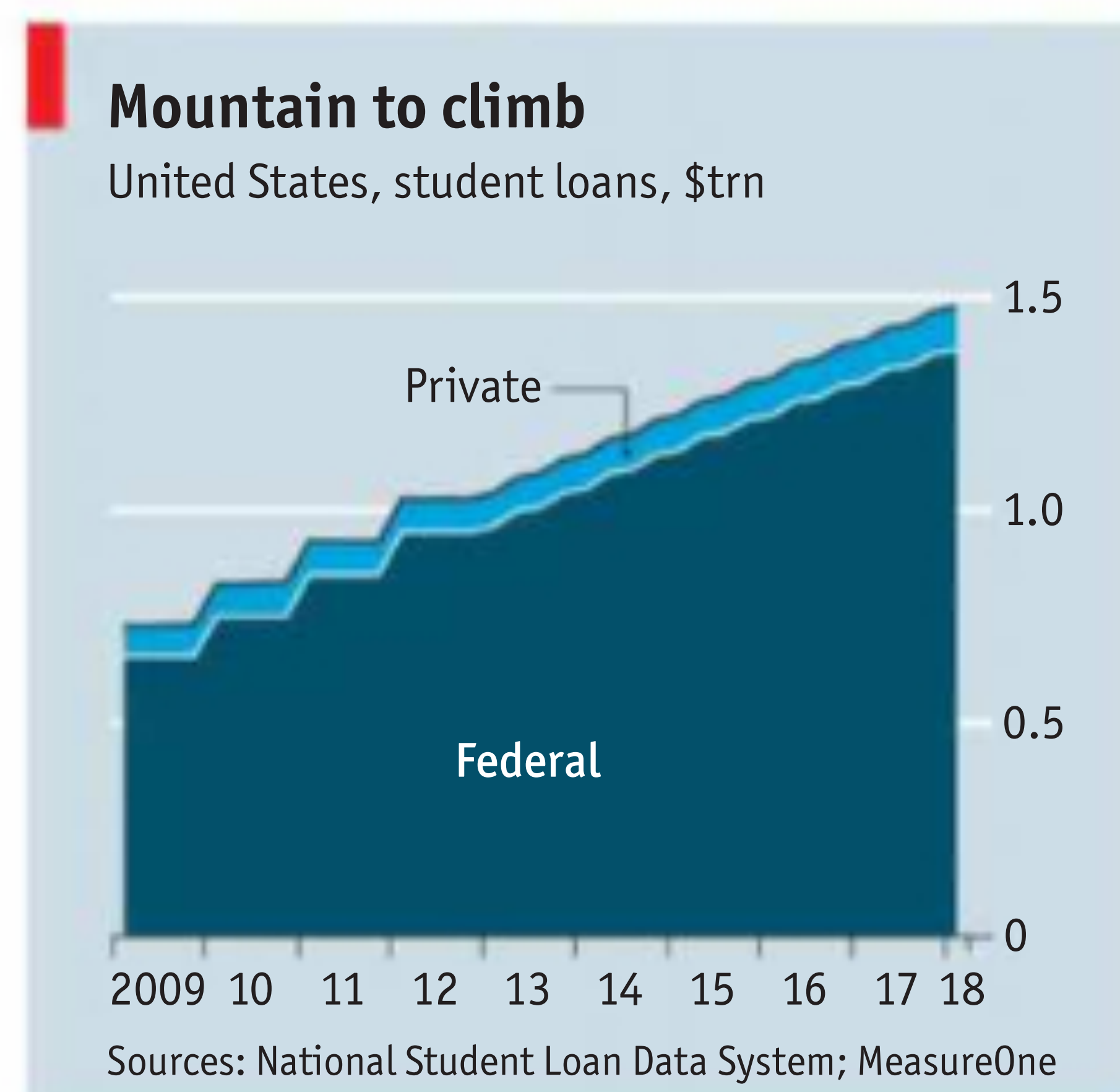
Purdue introduced ISAs in 2016. The first participants graduated last year, having used ISAs to cover fees of \$12,000 on average. Funding came from its endowment, which saw returns of 5-7%. Now it is raising capital from outside investors. Two other universities, Clarkson University in New York and Lackawanna College in Pennsylvania, have recently begun ISA schemes. One investor expects that another dozen will follow this autumn. The share of income signed over ranges from 2% to 17%, with students in high-earning fields, such as medicine or engineering, usually paying a smaller share of earnings for a shorter time than students of literature or fine art.

For investors, the safest bets are students on vocational courses—nurses, plumbers, computer programmers and the like—where postgraduate employment is the express aim and wages are predictable. The difficulty with less vocational subjects is in assessing whether a course will boost salaries sufficiently for the deal to make sense. Most universities rely on alumni surveys to find out how much their graduates earn, so data are patchy.

The stock of ISAs is tiny. Some 3,000-5,000 American students have used them to cover \$40m in tuition costs, estimates Charles Trafton of FlowPoint Education Management, which creates and invests in ISAs. For comparison, in the 2016-17 academic year, private student loans totalled \$11.6bn. Mr Trafton says he is buying ISAs for their combination of social impact and an investment return that he believes will match or exceed those for private loans, which are in the range of 4-15%.

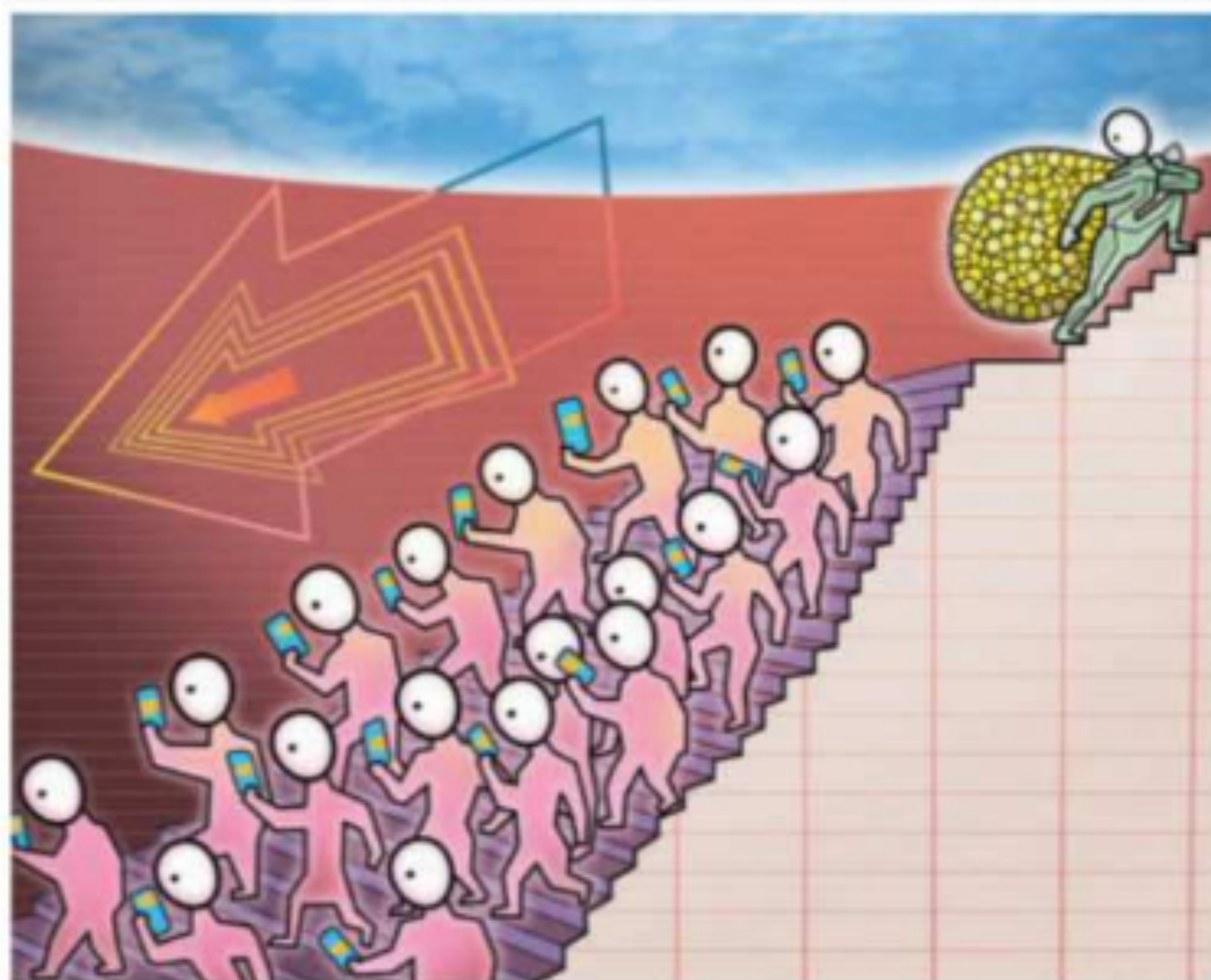
Only universities that are confident of their courses’ value on the jobs market will be interested in partnering with investors, says Mr Trafton. “Those that know their tuition is overpriced and unconnected to the economic value of their degrees will never have ISAs.” He puts the latter cohort at 70% of four-year universities.

Universities that do take the plunge will be tracking their graduates closely. That in turn will make pricing easier and help expand the market. Over time they will get fine-grained data on their graduates’ employment and salaries, says Tonio DeSorrento of Vemo Education, which operates ISAs for several institutions. Some may even adjust their educational offerings to protect their investments. ■



Free exchange | The ballot or the wallet

As inequality grows, so does the political influence of the rich



SQUEEZING the top 1% ought to be the most natural thing in the world for politicians seeking to please the masses. Yet, with few exceptions, today's populist insurgents are more concerned with immigration and sovereignty than with the top rate of income tax. This disconnect may be more than an oddity. It may be a sign of the corrupting influence of inequality on democracy.

You might reasonably suppose that the more democratic a country's institutions, the less inequality it should support. Rising inequality means that resources are concentrated in the hands of a few; they should be ever more easily outvoted by the majority who are left with a shrinking share of national income.

Indeed, some social scientists think that historical expansions of the franchise came as governments sought credible ways to assure voters that resources would be distributed more equitably. Daron Acemoglu and James Robinson argue that in the 19th century governments across the West faced the threat of socialist revolution. Mere promises of greater redistribution were insufficient to eliminate such threats; institutional guarantees were needed. Giving credible guarantees, they reckon, meant increasing the share of the population allowed to vote. Other researchers argue that anti-majoritarian institutions embedded within democratic systems, such as Britain's House of Lords and America's electoral college, were prized by elites not because they seemed likely to lead to better policies but because they served as a check on the egalitarian tendencies of the masses.

But studies of the relation between democracy and levels of inequality point in conflicting directions. Mr Acemoglu and Mr Robinson tackle the question in another paper, co-written with Suresh Naidu and Pascual Restrepo. They conclude that democracies raise more taxes than non-democracies do. But this does not translate reliably into lower levels of income inequality.

One possible reason for this disconnect is that people do not care much about inequality, or want their politicians to do anything about it. The results of surveys suggest otherwise, however. When asked by pollsters, more than two-thirds of Americans and Europeans express concern about current levels of inequality. Alternatively, the creaky wheels of Western democracies might have become too jammed to make progress on any issue of substance, whether inequality or some other persistent problem.

But this answer is also unsatisfying. The rich world has seen big policy shifts over the past decade. Last year America's government managed to make a sweeping change to taxes—one that tilts the distribution of income even more in favour of the rich. And in a recent study of European politics, Derek Epp and Enrico Borghetto find that political agendas in Europe have become less focused on redistribution even as inequality has risen. Though both inequality and public concern about it are increasing, politicians seem less interested in grappling with the problem.

Mr Epp and Mr Borghetto think another possible explanation should be considered. Rather than straightforwardly increasing pressure on politicians to do something about skewed income distributions, they suggest, rising inequality might instead boost the power of the rich, thus enabling them to counter the popular will. Research in political science gives substance to the impression that America's rich wield outsize influence. An examination of the political preferences of those with \$40m or more in net worth by Benjamin Page, Larry Bartels and Jason Seawright found that they overwhelmingly favour cutting spending on major social-safety-net programmes. (The general public wants it increased.) They are also more politically engaged than typical Americans: much more likely to have regular personal contact with elected officials, for example, and to give money to political campaigns. An analysis of campaign donations by Lee Drutman found that fewer than 30,000 people account for a quarter of all national political donations from individuals and for more than 80% of the money raised by political parties.

The relation between concentrated wealth and the political power of the rich is scarcely limited to political spending, or to America. The rich have many means to shape public opinion: financing nominally apolitical think-tanks, for instance, or buying media outlets. Although their power may sometimes be used to influence the result of a particular vote, it is often deployed more subtly, to shape public narratives about which problems deserve attention. Mr Epp and Mr Borghetto analysed bills brought before the parliaments of nine European countries between 1941 and 2014. Rising inequality, they found, is associated with political agendas more focused on matters related to "social order", such as crime and immigration. Issues such as economic justice are crowded out. They attribute this to the "negative agenda power" of the rich. As their wealth increases, they have a greater ability to press politicians to emphasise some topics rather than others.

A rising tide lifts all votes

The evidence that concentrated wealth contributes to concentrated power is troubling. It suggests that reducing inequality becomes less likely even as it becomes more urgent. It implies that a vicious cycle of rising inequality may be developing, with a loss of democratic accountability as a nasty side-effect. Some social scientists argue that this is, indeed, the way of things. In "The Great Leveler", published last year, Walter Scheidel writes that, across human history, inequality inevitably rises until checked by disasters like wars or revolutions.

This is excessively pessimistic. The rich are powerful, but not all-powerful, or uniform in their determination to keep distributional policies off the agenda. And Western democracies still function. If political leaders tried it, they might well find that redistribution is a winner at the ballot box. ■

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Sources for this story can be found at Economist.com/inequality2018



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Computer programming

And now for something completely different

Python, a simple and versatile computing language, has brought coding to a vast new audience

IN DECEMBER 1989 Guido van Rossum, a Dutch computer scientist, set himself a Christmas project. Irked by shortcomings in other programming languages, he wanted to build his own. His principles were simple. First, it should be easy to read. Rather than sprawling over line-endings and being broken up by a tangle of curly braces, each chunk would be surrounded with indented white space. Second, it should let users create their own packages of special-purpose coding modules, which could then be made available to others to form the basis of new programs. Third, he wanted a “short, unique and slightly mysterious” name. He therefore called it after Monty Python, a British comedy group. The package repository became known as the Cheese Shop.

Nearly 30 years after his Christmas invention, Mr Van Rossum resembles a technological version of the Monty Python character who accidentally became the Messiah in the film “Life of Brian”. “I certainly didn’t set out to create a language that was intended for mass consumption,” he explains. But in the past 12 months Google users in America have searched for Python more often than for Kim Kardashian, a reality-TV star. The rate of queries has trebled since 2010, while inquiries after other programming languages have been flat or declining (see chart on next page).

The language’s popularity has grown

not merely among professional developers—nearly 40% of whom use it, with a further 25% wishing to do so, according to Stack Overflow, a programming forum—but also with ordinary folk. Codecademy, a website that has taught 45m novices how to use various languages, says that by far the biggest increase in demand is from those wishing to learn Python. It is thus bringing coding to the fingertips of those once baffled by the subject. Pythonistas, as aficionados are known, have helped by adding more than 145,000 packages to the Cheese Shop, covering everything from astronomy to game development.

Mr Van Rossum, though delighted by this enthusiasm for his software, has come to find the rigours of supervising it, in his role as “benevolent dictator for life”, unbearable. He fears he has become something of an idol. “I’m uncomfortable with that fame,” he says, sounding uncannily like Brian trying to drive away the crowds of disciples. “Sometimes I feel like everything I say or do is seen as a very powerful force.” On July 12th he resigned, leaving the Pythonistas to manage themselves.

Nobody expects the faddish statistician

Python is not perfect. Other languages have more processing efficiency and specialised capabilities. C and C++ are “lower-level” options which give the user more control over what is happening within a

computer’s processor. Java is popular for building large, complex applications. JavaScript is the language of choice for applications accessed via a web browser. Countless others have evolved for various purposes. But Python’s killer features—simple syntax that makes its code easy to learn and share, and its huge array of third-party packages—make it a good general-purpose language. Its versatility is shown by its range of users and uses. The Central Intelligence Agency has employed it for hacking, Pixar for producing films, Google for crawling web pages and Spotify for recommending songs.

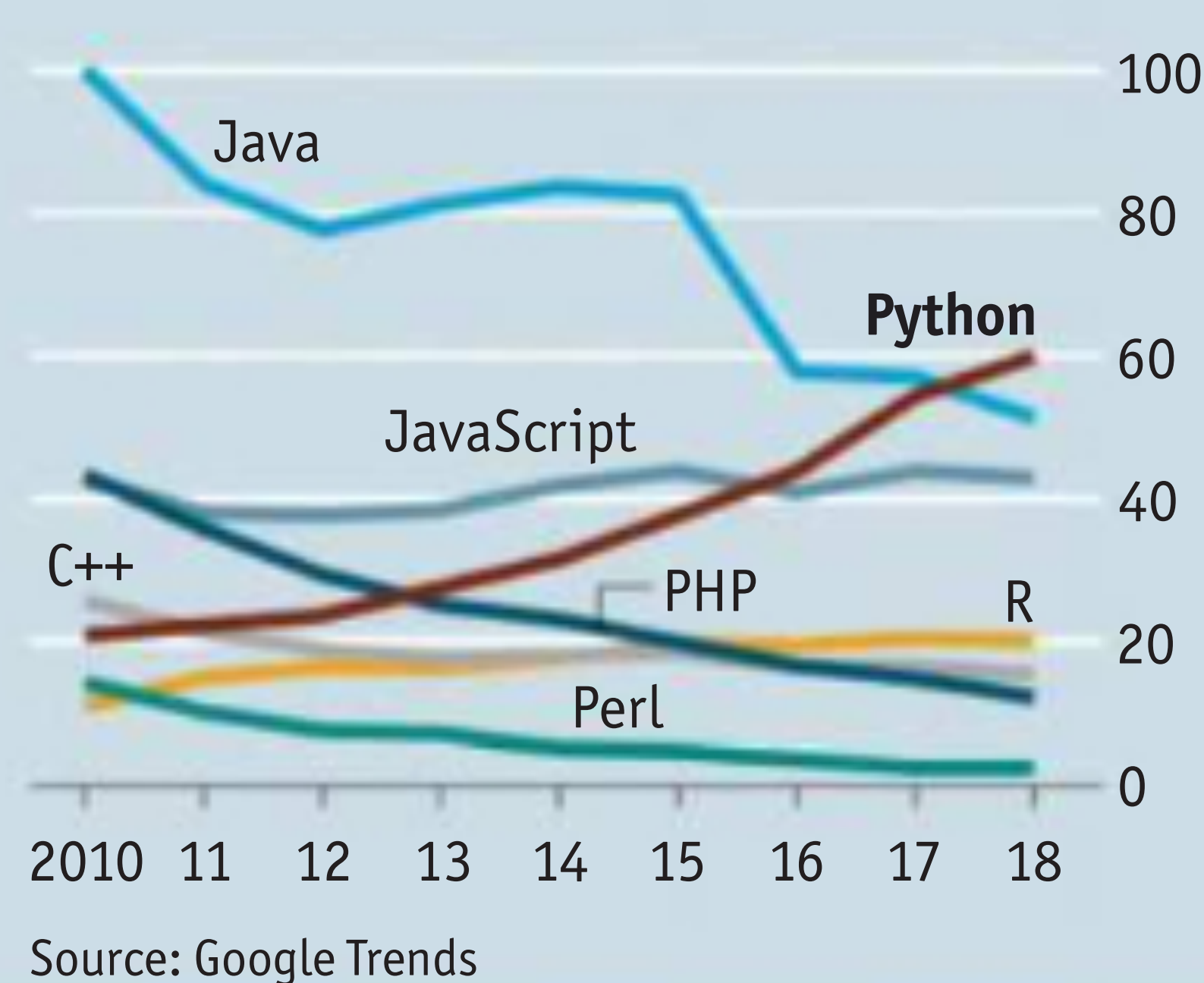
Some of the most alluring packages that Pythonistas can find in the Cheese Shop harness artificial intelligence (AI). Users can create neural networks, which mimic the connections in a brain, to pick out patterns in large quantities of data. Mr Van Rossum says that Python has become the language of choice for AI researchers, who have produced numerous packages for it.

Not all Pythonistas are so ambitious, though. Zach Sims, Codecademy’s boss, believes many visitors to his website are attempting to acquire skills that could help them in what are conventionally seen as “non-technical” jobs. Marketers, for instance, can use the language to build statistical models that measure the effectiveness of campaigns. College lecturers can check whether they are distributing grades properly. (Even journalists on *The Economist*, scraping the web for data, generally use programs written in Python to do so.)

For professions that have long relied on trawling through spreadsheets, Python is especially valuable. Citigroup, an American bank, has introduced a crash course in Python for its trainee analysts. A jobs website, eFinancialCareers, reports a near-four-fold increase in listings mentioning Python ►►

Biggus uptickus

US, Google searches for coding languages
100 = highest annual traffic for any language



► between the first quarters of 2015 and 2018.

The thirst for these skills is not without risk. Cesar Brea, a partner at Bain & Company, a consultancy, warns that the scariest thing in his trade is “someone who has learned a tool but doesn’t know what is going on under the hood”. Without proper oversight, a novice playing with AI libraries could reach dodgy conclusions. Bernd Ziegler, a partner at Boston Consulting Group, says that his firm reserves such analysis to members of its data team.

Rossum’s universal robot

One solution to the problem of semi-educated tinkerers is to educate them properly in the language’s arcana. Python was already the most popular introductory lan-

guage at American universities in 2014, but the teaching of it is generally limited to those studying science, technology, engineering and mathematics. A more radical proposal is to catch ’em young by offering computer science to all, and in primary schools. Hadi Partovi, the boss of Code.org, a charity, notes that 40% of American schools now offer such lessons, up from 10% in 2013. Around two-thirds of 10- to 12-year-olds have an account on Code.org’s website. Perhaps unnerved by a future filled with automated jobs, 90% of American parents want their children to study computer science.

How much longer Python’s rise will continue is anybody’s guess. There have been dominant computer languages in the past that, while not exactly “one with Nineveh and Tyre”, now skulk in the background. In the 1960s, Fortran bestrode the world. As teaching languages for neophytes, both Basic and Pascal had their moments in the sun. And Mr Partovi himself plumped for JavaScript as the language for Code.org’s core syllabus, since it remains the standard choice for animating web pages.

No computing language can ever be truly general purpose. Specialisation will necessarily remain important. It is nevertheless true that, in that long-past Yuletide, Mr Van Rossum started something memorable. He isn’t the Messiah, but he was a very clever boy. ■

as several thousand DNA base pairs. This raises the possibility that non-target genes or regulatory sequences could be affected by the editing process, a discovery which comes in the wake of other recent work which raised concerns that CRISPR-Cas9 gene-editing might trigger cancers. Cue investor panic and nosedives in the share prices of gene-editing companies.

Although Dr Bradley’s study certainly adds to concerns over the accuracy and safety of CRISPR-Cas9, it is by no means a show stopper. There are a number of caveats which may, in time, turn out to mean the findings are less concerning than they seem today.

For one thing, as Robin Lovell-Badge, an expert in the area who works at the Francis Crick Institute in London, observes, the study focuses on a form of genome-editing called “non-homology end joining”. This, he says, is known to be an untrustworthy approach compared with other ways of using CRISPR-Cas9. Moreover, the actual impact of the technique (and, indeed, of any gene-editing tool) will depend on the types of cells being edited and the nature of the changes being made.

Dr Lovell-Badge says that “it is not clear that the specific protocols used in the paper would relate much to any sensible use of genome-editing clinically”. In any case, CRISPR editing is a work in progress. New versions of the technique are being developed, with the intention of improving its accuracy and efficiency. Problems with one particular approach will doubtless act as a spur to innovation in others.

Dr Bradley’s study does nevertheless serve as a timely reminder of the need for caution when the technology is used in people. (It raises fewer concerns for gene-editing in research and for agricultural purposes such as crop improvements, where off-target effects are of less consequence.) Clinical applications will need to show that the only alterations are those that were intended.

In particular, the study raises the stakes for those who wish to make heritable changes to the human genome. This week a group of bioethicists concluded, in a report for the Nuffield Council on Bioethics, a think-tank in Britain, that in some circumstances the genetic engineering of human sperm, eggs or embryos could be morally acceptable. The technology is seen as potentially useful for removing heritable diseases or for reducing genetic predispositions to cancer.

But the report concluded that two principles should serve as a guide. One is that the changes brought about by gene-editing should not increase “disadvantage, discrimination or division in society”. The other is that such changes should be consistent with the welfare of the future person. For that to happen, any form of gene-editing needs to be demonstrably safe. ■

Medicine

Cutting to the truth

The safety of CRISPR-Cas9 gene editing is being debated

A GREAT deal rides on the accuracy of the gene-editing tool known as CRISPR-Cas9. Since its discovery in 2012 it has become popular for tinkering with genomes of all kinds, thanks to its ability to make editing cheap and easy. Firms such as CRISPR Therapeutics, Intellia Therapeutics and Editas Medicine have been built on the idea that it could be used to develop treatments for human diseases. Editas, based in Cambridge, Massachusetts, announced this year that it would work on five new human medicines over the next five years.

In China the technology is already in clinical use. In Hangzhou Cancer Hospital, for example, CRISPR-Cas9 is being employed to engineer immune-system cells removed from patients with cancer of the oesophagus. The hope is that when the engineered cells are returned to a patient’s body, the editing will have improved their ability to attack tumours. More studies in-

volving human beings are expected in other countries for the treatment of beta-thalassaemia, a blood disorder, and Leber’s congenital amaurosis, a form of blindness. Further ahead, there is hope that CRISPR-Cas9 will help treat diseases such as AIDS, cystic fibrosis, Huntington’s chorea and Duchenne muscular dystrophy.

However, a study just published in *Nature Biotechnology* has found that when CRISPR-Cas9 is used to edit genomes, off-target DNA damage is more common than had previously been appreciated. This piece of research, co-ordinated by Allan Bradley of the Wellcome Sanger Institute, in Cambridge, England, looked at genetic changes in mouse and human cells across large stretches of the genome. In around 20% of cells examined, the use of CRISPR-Cas9 had caused unintended deletions or rearrangements of strings of DNA more than 100 base pairs long—and some as long

Archaeology

Toast before tillage

An excavation in the Middle East shows that bread predates farming

ABSENCE of evidence is not evidence of absence. The value of that aphorism has just been shown by a discovery made at Qa' Shubayqa, in north-eastern Jordan. Amaia Arranz-Otaegui of the University of Copenhagen and her colleagues found breadcrumbs in two ancient fireplaces there. Not that unusual as archaeological discoveries go, except that these fireplaces were between 14,200 and 14,400 years old. The loaves the crumbs came from were thus baked more than 4,000 years before the beginning of agriculture.

That bread was coeval with cereal farming was an easy idea to accept in the absence of contrary evidence—as was the case until the publication of Dr Arranz-Otaegui's discovery in the *Proceedings of the National Academy of Sciences*. Before it, the oldest evidence of breadmaking was from 9,100 years ago, in Anatolia.

Altogether, Dr Arranz-Otaegui and her colleagues found 24 charred breadcrumbs (one of which is pictured below) scattered in the ashes in the fireplaces. Each was several millimetres across. The hearths themselves had been laid by people now known as Natufians, who were hunter-gatherers. The crumbs were among more than 65,000 burnt fragments of plants such as tubers, legumes and wild grains. The bread's ingredients were species of wheat and barley growing wild in the region (which was at that time fertile, though it is now desert), and crushed tubers from *Bolboschoenus glaucus*, a type of papyrus.

Dr Arranz-Otaegui is not claiming that breadmaking was common this early in human history. Indeed, she acknowledges that even though her find shows that people knew how to bake the stuff 14,000



Crumbs!

years ago, foraging for the ingredients would have been a considerable chore. Which leads to the question, why bother?

One hypothesis which might answer that question, but for which there is still a complete absence of evidence, is that beer-making, too, is older than believed. The oldest evidence of brewing suggests that beer was originally made from bread rather than directly from grains. This has led some people to hypothesise that acting as a feedstock for brewing was bread's initial purpose. Only later did it become the staff of life.

If the Natufians did understand how to brew beer from bread, that would surely be a motive to search out the relevant ingredients and go to all the trouble of grinding them into flour, mixing them with water to form a dough, and then baking them. Indeed, it would be motive to start garnering some of those seeds and planting them in small patches of cleared ground, so that they could more easily be collected. The question “why bother”—both with baking and with tillage—might have its answer if further excavations at Qa' Shubayqa or elsewhere reveal evidence of the world's oldest brewery. ■

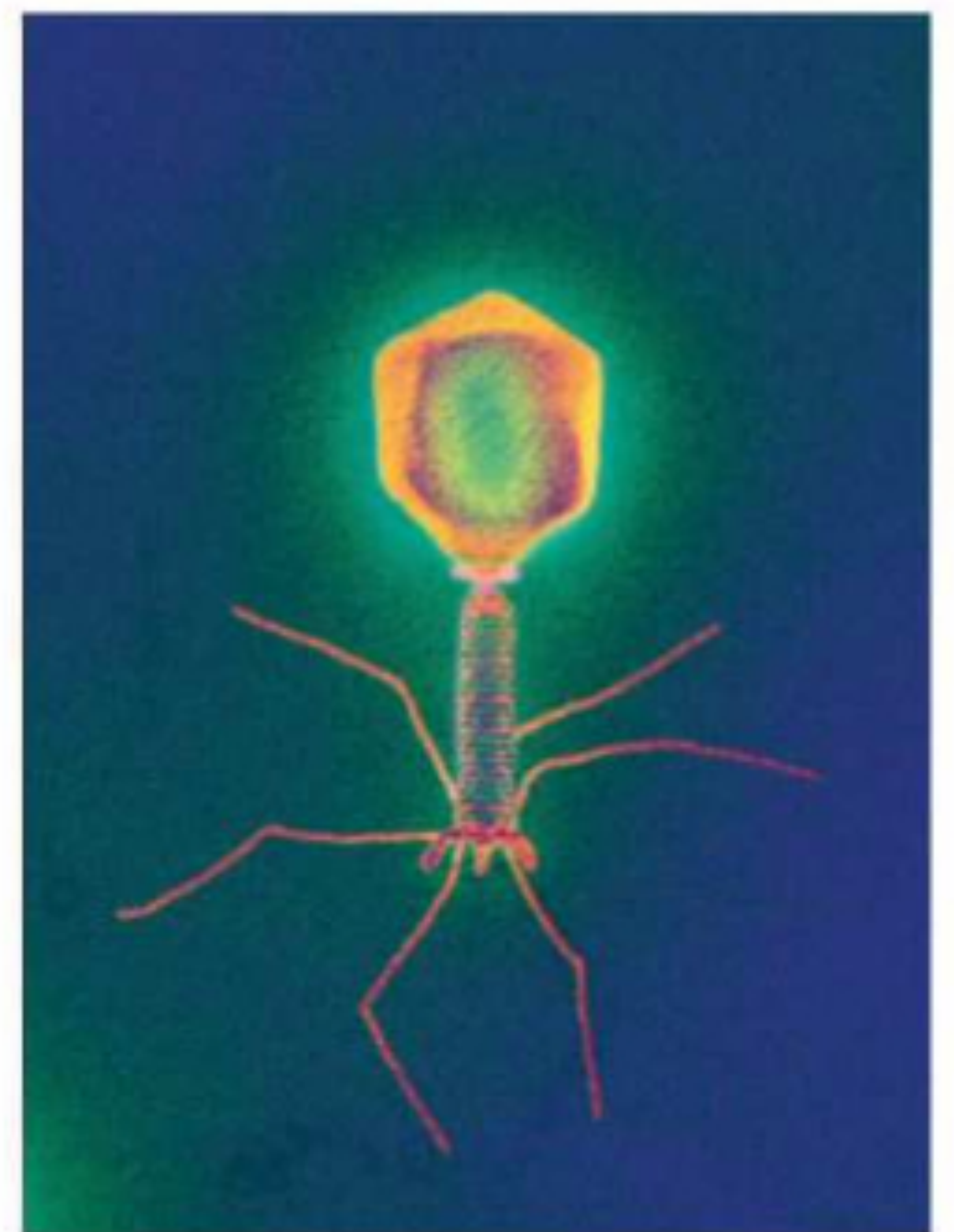
Virology

Second-mover advantage

Viruses that attack bacteria have evolved to collaborate

THAT predators often hunt in packs is a commonplace. Wolves do it. Killer whales do it. Even *Velociraptor*, a species of dinosaur made famous by “Jurassic Park”, is believed to have done it. These are, or were, all intelligent species, capable of exchanging and interpreting information. But the logic of pack hunting, that many may achieve what one alone cannot, and that individual pack members may perform different roles, does not depend on intelligence. Indeed, evidence has now emerged that this logic applies to viruses, the simplest biological entities of all. It was published this week in *Cell*, by Edze Westra and Stineke van Houte at the University of Exeter, in England.

The viruses in question are bacteriophages, which “hunt” bacteria. They do not eat their prey. Rather, they take over its genetic apparatus to create replicas of themselves, killing the host as a consequence. To do so they have to penetrate a bacterium's cell wall and then subvert its internal defences, of which there are several. One of the best known, because it is the basis of an emerging gene-editing technology (see previous page), is called CRISPR.



Leader of the pack

The CRISPR system detects and cuts up alien DNA. In the wild, such DNA will almost always have come from a virus. To counter this, some bacteriophages have evolved ways of gumming up CRISPR's cellular machinery. Dr Westra and Dr van Houte have shown that, in essence, such phages collaborate. Some do the gumming. Others hijack the genetic apparatus.

Dr Westra and Dr van Houte were able to deduce what was going on by watching oddities in the rise and fall of bacterial and phage numbers in cultures. On the face of things, a population of CRISPR-armed bacteria would be expected to plummet in the presence of phages counter-armed with anti-CRISPR mechanisms. But this does not always happen. Instead, bacteriologists studying the matter have noticed that phages with anti-CRISPR traits are sometimes unsuccessful in attacking bacteria with CRISPR defences, and die out. Perplexed by this, the two researchers decided to take a closer look.

To do so, they and their colleagues generated a population of CRISPR-armed bacteria and another of phages with anti-CRISPR traits, and monitored exactly what happened when they introduced the one to the other. To start with, the density of viruses always declined. In other words, most of the early anti-CRISPR attacks were unsuccessful. These failed attacks did not leave the bacteria unscathed though. They resulted in the CRISPR defensive systems being weakened, a process the researchers were able to track by stopping an attack in midstream, washing away the phages, and testing the ability of the remaining bacteria to chop up alien DNA.

After this initial fall in viral numbers, if the culture was left long enough—and if there were enough phages in the first place—things eventually turned round. As the number of bacteria with weakened de- ►►

► fences increased, more and more of them were subject to subsequent, lethal attacks, resulting in the creation of more phages. Ultimately, as the phages multiplied, the bacteria were overwhelmed and wiped out. Whether bacteria or viruses prevailed thus depended on the initial ratios of the two. Below a certain threshold of phage abundance at the beginning, the bacteria prevailed; above it, the viruses did.

Intriguingly, the evolutionary success of the phages' approach depends on a second phenomenon—also first studied in social animals—as well. This is kin selection. It relies on the fact that genetically determined behaviour that harms an individual can nevertheless spread if it disproportionately helps kin that carry the same genetic trait. In the case of the phages, the anti-CRISPR mechanism is exactly such a trait. Some viruses carrying it sacrifice themselves so that others may multiply.

Understanding this interaction between phages and bacteria is important, though, for reasons beyond its evolutionary elegance. One such is that phages are

under consideration as alternatives to chemical antibiotics, particularly in situations where bugs are immune to those antibiotics. A second is that phages are a crucial, though ill-understood, part of the gut microbiome, the importance of which to human life is becoming clearer by the day. A third is that the interactions of phages and their hosts may be analogous to those of other viruses and other hosts, including human beings. Though animals do not employ CRISPR as part of their defence against viruses, they have a host of other antiviral mechanisms.

Dr Westra and Dr van Houte argue that theories about the spread of disease do not sufficiently take into account the possibility of these defences being damaged and weakened by failed attacks when determining the threats posed by specific sorts of viral pathogen. Monitoring such damage, and the degree to which it makes organisms vulnerable to later attacks, might improve control of the transmission of such diseases, and also the treatment of those who catch them. ■

Like a small plane, an autogyro employs a propeller (either front-mounted, as Earhart's was, or at the rear, like 007's and the Liberty's) to provide forward thrust. But instead of having fixed wings, an autogyro's lift comes from a rotor. Unlike a helicopter's, though, this rotor is not powered by the engine. Instead, it is turned by on-coming air, a result of the propeller's forward thrust, flowing over the blades.

According to PAL-V the Liberty can take off and land on a runway as short as 90 metres. In aircraft mode, it can carry two people at up to 180kph (about 110mph) for a distance of 400-500km. Folding up its rotors, tail and propeller, which takes ten minutes, turns it into a car.

In either mode the Liberty consumes standard petrol, so is easy to refuel. And in the event of an engine failure while airborne, PAL-V claims, it could flutter down safely onto a patch of land no bigger than a tennis court. To be on the safe side, however, it is fitted with two small combustion engines, either of which could be used to fly or drive it if the other stops running.

Unlike the makers of some other novel small aircraft, PAL-V has eschewed electric power, at least for now. Existing batteries cannot provide a useful range, says George Tielen, the firm's test pilot. And unlike passenger-drone companies, whose products employ several electric rotors to take off and land vertically, PAL-V is not seeking approval for autonomous operations. Requiring people to have both a driver's and a pilot's licence lets the company meet existing rules and thus enter the market faster.

According to Mr Tielen, the Liberty will allow someone to drive to an airfield or other suitable strip of terrain, take off, fly to somewhere similar near his destination, land and complete his journey by road—with the flexibility that if, say, the weather were to turn nasty while he was there, he could then drive home. That convenience, though, comes with a price tag that starts at €300,000 (\$350,000). Which would buy a lot of air fares and Uber rides. ■

Flying cars

A James Bond special

FARNBOROUGH

A modern take on 007's autogyro

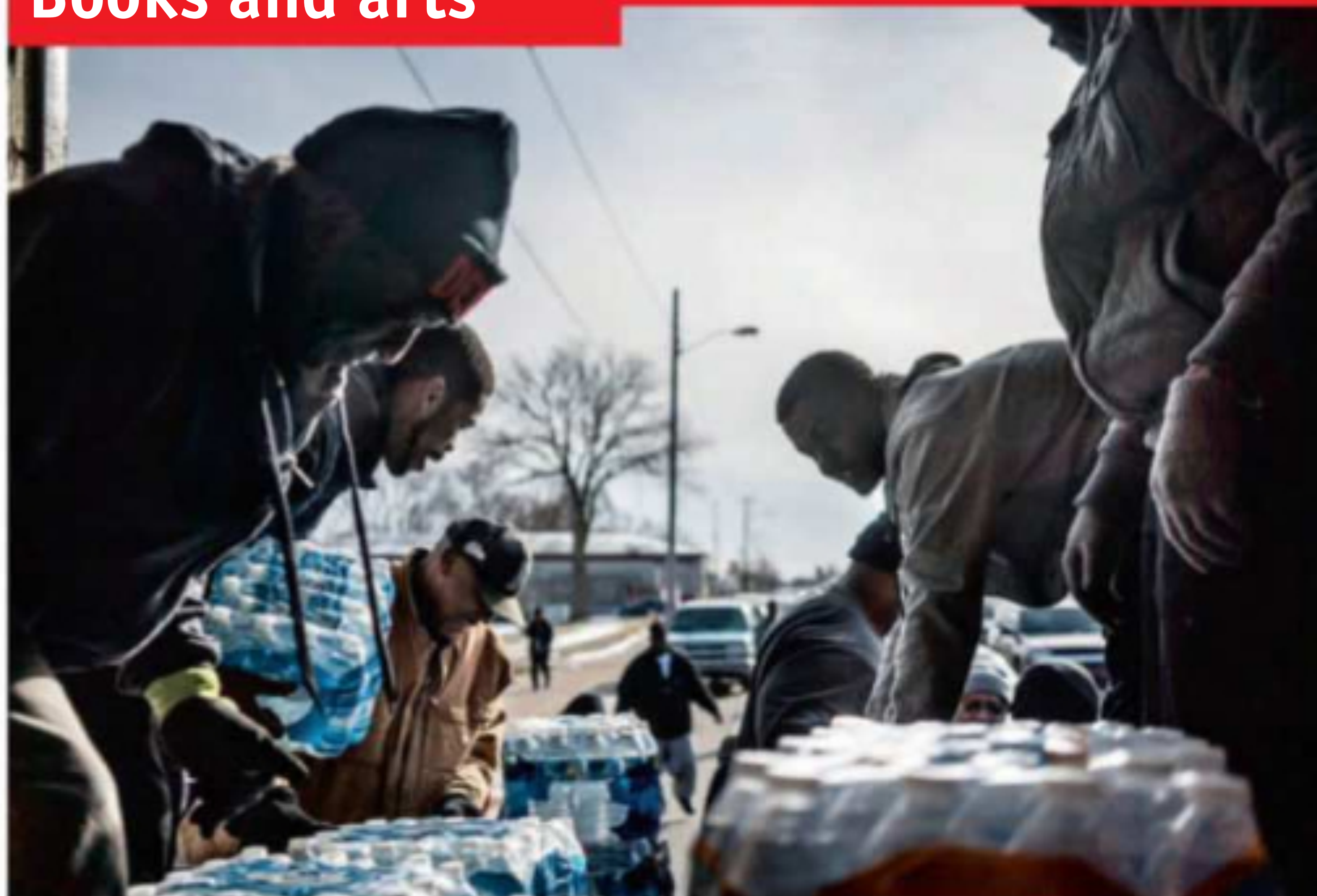
UNUSUAL aircraft are a regular sight at the Farnborough air show, which opened in Britain this week. But the particular unusualness of the Liberty is not so much that it is a flying car, but that flies as an autogyro. Although the Liberty remained firmly on the ground during the show, it is described by its makers, PAL-V, a Dutch firm, as a “production model” that will be used to obtain the necessary approvals for use on the road and in the air, so

that deliveries can begin in 2020.

Autogyros have been around since the early days of aviation. Amelia Earhart set an altitude record in one in 1931. Three years later, an autogyro carried a soon-to-be jilted groom to what he thought would be his wedding, in a film called “It Happened One Night”. Another film, “You Only Live Twice”, which was released in 1967, featured an autogyro called *Little Nellie*, piloted by James Bond.



OK Blofeld. I'm coming after you



The Flint water scandal River of fire

FLINT, MICHIGAN

Two books explore the causes and consequences of one of America's biggest public-health disasters

“YOU really do not want to miss this,” says J.D. Winegarden, a third-generation Flintonian, as he conducts a tour of the nicest bits of his city. From the sylvan grave of Jacob Smith, a fur-trader who founded the town in 1819, he whizzes past Factory One, the birthplace of General Motors, to the Flint Institute of Arts, with its surprisingly snazzy glass collection, and the adjacent planetarium. Beyond blocks of boarded-up houses, many of them still beautiful, Mr Winegarden shows off University Avenue, which connects two of Flint's five colleges. The tour ends in a posh neighbourhood near downtown, where in the 1920s GM executives built mansions that rival each other in elegance.

Flintonians are proud of their home town and resent its status as an emblem of urban decay. “It is so important to come and see,” implores Karen Weaver, the mayor, regretting the damage inflicted by the water scandal on Flint's already grim reputation. As well as ranking among America's poorest and most violent cities, Flint is now known as a place where the government poisons its citizens with brown, foul-smelling water—and then lies about it until the evidence is irrefutable.

How did one of America's most prosperous places sink so low? Like Detroit, 60 miles to the south, Flint was once a hub of industry. In its heyday GM employed 75,000 workers there; the main drag features statues of Louis Chevrolet and David Buick. As recently as 1980, the self-pro-

The Poisoned City: Flint's Water and the American Urban Tragedy. By Anna Clark. *Metropolitan Books*; 320 pages; \$30

What the Eyes Don't See: A Story of Crisis, Resistance and Hope in an American City. By Mona Hanna-Attisha. *One World*; 384 pages; \$28

claimed “Vehicle City” had the highest median income for American workers under 35. But Flint was over-reliant on one company and was hit hard by the downturn in carmaking. These days GM employs fewer than 7,000 in the city.

Unemployment led to white flight, followed by middle-class black flight, which in turn led to a shrinking tax base and a predominantly African-American population falling into poverty. Today Navy SEAL medics reputedly train in Flint because it offers the country's closest approximation to a metropolis blighted by years of war.

Nor any drop to drink

Seven years ago Rick Snyder, Michigan's Republican governor, declared Flint to be in a state of financial emergency. He appointed an emergency manager with broad powers to run the struggling city's affairs—and cut costs wherever possible. This is the backdrop to the public-health disaster chronicled in “The Poisoned City” by Anna Clark, and “What the Eyes Don't See” by Mona Hanna-Attisha. Ms Clark is a De-

troit-based journalist; Ms Hanna-Attisha is a paediatrician who helped to expose the contamination of Flint's water supply.

Ed Kurtz, the original emergency manager, faced a tough job. How do you cut costs in a city where 40% of the population lives below the federal poverty line? He and his successor, Darnell Earley, reduced municipal services to a bare minimum. Notwithstanding the crime rate, the police department shrank; in a place with a propensity to arson, firefighters were laid off. A fateful decision was made in April 2014. To reduce the high water bills, the municipal water source would be switched from Lake Huron to the local Flint river. “Everyone from Flint knows the river is highly toxic,” says Mr Winegarden, because of the industrial sludge that poured into it. Local lore says the river has caught fire twice.

Had the dirty river water been treated with the right chemicals, thousands of people would not have been poisoned by lead and bacteria, including one that causes Legionnaires' disease. But to save more cash, the city declined to add anti-corrosion agents that would have stopped the water eating away at the lining of the pipes, thus preventing lead from leaching out. That might have cost around \$100 a day—peanuts compared with the hundreds of millions that the state and federal governments are now forking out to repair some of the damage.

These two books both show how an austerity drive with racial undertones led to the mass poisoning of mostly poor and black residents, and how officials tried to cover it up, attempting to discredit anyone who came up with proof that the water was tainted. But they are complementary. Ms Clark is more analytical. “Lead is one toxic legacy in American cities,” she writes. Others include segregation, redlining and the practice of well-heeled neighbourhoods splitting off to form their own ►►

Also in this section

68 A murder at Harvard

68 The life of a Mughal empress

69 Muriel Spark at 100

70 Johnson: Fossil hunting

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► municipalities. “This is the art and craft of exclusion. We built it into the bones of our cities as surely as we laid lead pipes.”

Ms Hanna-Attisha is more personal and emotional. She vividly describes the effects of lead-poisoning on her young patients. Even at low levels, the damage is irreversible, she says. For an infant, exposure to lead can result in developmental delays, a drop in IQ, aggressive behaviour and mood swings. “As lead-poisoned kids reach their teens,” she writes, “they have a much harder time at school and are more likely to drop out.” In their 20s they may be more likely to commit violent crime. Lead may even alter a child’s DNA, so the effects cascade down the generations.

She is at her best when recounting the detective work she undertook after a tip-off about lead levels from a friend who had worked for the Environmental Protection Agency. Her aim was to show that the spike she noticed in lead in her patients’ blood could be traced to the moment Flint changed its water supply. Extracting the relevant data on other residents from unwilling bureaucrats was hard, but eventually Ms Hanna-Attisha got the figures that proved the correlation. On September 24th 2015 she went public with her findings.

Return to Vehicle City

The blowback was immediate. A spokesman for the state’s environment agency said Ms Hanna-Attisha’s conclusions were irresponsible and insisted that Flint’s drinking water was safe. But her evidence was too persuasive to ignore. The scandal ultimately led to criminal prosecutions of numerous officials involved in the key decisions—as well as a switch back to water from Lake Huron in October 2015.

Both books linger on the aftermath. Ms Clark describes a host of lawsuits intended to hold those responsible to account. In a surprisingly big and early victory, in April 2017, the state agreed to pay up to \$87m to replace pipes, and to provide filters and bottled water and conduct water-testing. For her own part, she says in person, Ms Hanna-Attisha is focusing on mitigating the effects on children. Flint has two new child-care centres serving 500 young patients, she notes. She is raising money for a children’s-health charity (it already has \$20m in the kitty) and runs the Flint Registry, a project funded by the Centres for Disease Control and Prevention, which identifies and helps victims of lead-poisoning.

“Flint will not be defined by this crisis,” vows Ms Hanna-Attisha. It brought out the locals’ fighting spirit, she says, and drew attention to their needs. The most important long-term solution, reckons Mayor Weaver, is “jobs, jobs, jobs”. For the first time in more than 30 years, a company is building a factory in town. In October Lear, a maker of car seats, broke ground on a site formerly known as Buick City. ■

Murder most sensational

The room where it happened

Blood & Ivy: The 1849 Murder That Scandalised Harvard. By Paul Collins. *W.W. Norton & Company*; 320 pages; \$26.95 and £21.99

VISITING Boston in 1868, Charles Dickens was asked what he wanted to see most. The room where it happened, Dickens said—by which he meant the scene of a grisly murder that had scandalised the city nearly two decades earlier. The crime had all the ghoulish ingredients of a potboiler: the sudden disappearance of a wealthy landowner and Harvard graduate, George Parkman (pictured); another Harvard man—John Webster, a professor of chemistry and mineralogy—as prime suspect; a dismembered body presumed to be the victim’s; a sullen janitor who supplied the anatomy laboratory with cadavers; and a trial reported in screaming headlines.

In “Blood & Ivy”, Paul Collins ushers readers into that fabled room—and the incestuously tight world of Brahmin Boston. That term refers to a nexus of privileged clans that included the Adams, Cabot and Lodge families. The Brahmins invariably went to Harvard, and in the foggy milieu that Mr Collins entertainingly evokes, suspect, victim, lawyers and many of the witnesses all came from that social subset.

Parkman vanished on the afternoon of November 23rd 1849. Despite a city-wide dragnet, the case hit a dead end until Ephraim Littlefield, a medical-school janitor who lived next to Webster’s college study, hacked his way into the vault under the professor’s rooms and unearthed a pelvis, thigh and lower leg—presumed to be the missing man’s. Webster was arrested and locked up to await trial. The mantle of privilege remained intact, however. While his cellmates dined on slop, the suspect had oysters and cream cakes delivered from Parker’s Restaurant.

The capital trial of a Harvard fellow was a sensation. Only one had ever been executed—George Burroughs, hanged for witchcraft in the 17th century. Though seating was sorely limited, some 7,000 spectators moved in shifts through the courtroom on the first day alone. The event spawned betting pools and merchandising (cough-syrup adverts played on Webster’s background in chemistry). Along with the theatrics, Mr Collins explains, the case was a landmark in the use of forensic science, and for the judge’s elaboration of the notion of guilt “beyond a reasonable doubt”. If, Lemuel Shaw, chief justice of Massachusetts, told the jurors, they “cannot say they feel an abiding conviction, to a moral cer-



Parkman in one piece

tainty of the truth of the charge...the accused is entitled to...an acquittal.”

Although the United States Supreme Court re-examined that definition in 1994, the “Webster charge” remained the classic instruction for juries in Massachusetts until 2015. It is not a spoiler to say that the verdict was more controversial. After all, not only Webster’s life but Harvard’s reputation was at stake. Ivy, it appeared, was not immune to blight. “At such times,” Judge Shaw observed, “the glaze of civilisation and culture shows very thin in spots.” ■

Mughal history

Not just a pretty face

Empress: The Astonishing Reign of Nur Jahan. By Ruby Lal. *W.W. Norton & Company*; 336 pages; \$27.95 and £19.99

THAT India’s Mughal emperors could be devoted to their queens is no surprise. The Taj Mahal, their most famous monument, was a homage to the memory of Mumtaz Mahal, the emperor Shah Jahan’s most-mourned wife. Less well-known is that Mumtaz’s aunt (and Shah Jahan’s step-mother), Nur Jahan, was, for 16 years from 1611, in effect India’s co-ruler.

In fact, according to Ruby Lal’s biography, she became “prime minister as well as empress”. Uniquely for a Mughal woman, her name featured on coins. Not until Indira Gandhi became prime minister in 1966 would India again be ruled by a woman. (Queen Victoria was rather hands-off.)

Not that Nur Jahan has been forgotten. Hers is a household name in South Asia, and her story has been told in at least eight films, several plays and many historical romances. But she is famous for having won the heart of her husband, the emperor Ja- ►►

► hangir, with her beauty, and for using her charm to promote her own interests and her allies'. She came to be seen, in Ms Lal's words, as "a gold-digger and schemer", the "besotted" Jahangir as a "drunk, stoned and oversexed despot".

This cartoonish version is not total fantasy. Nur was Jahangir's 20th and last wife (by his own count; other estimates number his harem in the hundreds). He was indeed a heavy drinker—possibly never fully sober, by one report—and a user of opium. But Ms Lal's meticulous book seeks to show that history has been unfair to Nur Jahan, a woman of many talents and remarkable force of character.

She designed gorgeous gardens and the tomb that became the model for the Taj Mahal itself. She was a great tiger huntress and brilliant shot (a classic portrait shows her tamping down the gunpowder in a musket). She was an accomplished soldier, planning the operation that rescued her husband from a kidnapping. And she was a skilled exponent of the ruthless power politics of the Mughal court, where it was a tradition for princes to rebel against emperor-fathers, and to take no prisoners.

Nur Jahan's accomplishments have been belittled for two reasons. One is that history is written by its victors, and she lost a power struggle on Jahangir's death—to Shah Jahan. To erase her from history, he may even have tried to withdraw the coins that bore her name. Certainly, his official chronicles overlooked her achievements and blamed her for the turmoil that marked the last years of Jahangir's reign.

The second reason is that she was a woman, and as such, according to a guide to conduct popular among the Mughal aristocracy, "it were best...not to come into existence, but, being born, she had better be married or be buried." When Jahangir's great-aunt wanted to make the *haj*, his six-year-old brother was told to escort her: even a little boy was man enough to look after the empire's most senior women.

The great-aunt seems to have bridled, and the boy was left behind. And Nur Jahan's life shows women could soar beyond the harem. Still, both popular myth and serious historiography have conspired to diminish her to a demeaning stereotype, worsened in some Western accounts by Orientalist condescension.

In filling in the details of Nur Jahan's life, Ms Lal has not only written a revisionist feminist biography; she has also provided a vivid picture of the Mughal court, with its luxuries, beauties, intrigues and horrors. Moreover, at a time when India's Hindu-nationalist government chooses to emphasise one strain in the country's history, she offers a reminder of the diversity of Indian tradition. Nur Jahan was a Shia Muslim, but "married a Sunni king who had a Hindu mother and both Hindu and Muslim wives and concubines." ■

Literary posterity

In her prime

On her centenary, Muriel Spark's fiction is more relevant than ever

LIKE Jean Brodie, her greatest creation, Muriel Spark puzzled people as much as beguiling them. She was a Scottish writer who spent most of her life in self-imposed exile in Africa, New York and Italy. She lived in Tuscany with Penelope Jardine, her lifetime companion and literary executor, yet batted off any suggestion that they were lovers. Her novels are mostly short; some were written in the space of six to eight weeks. This brevity annoyed many reviewers (mostly the men). An anonymous critic, writing in 1970 of "The Driver's Seat", a taut psychological thriller, moaned that it "will take you 60 minutes to read and cost you sixpence a minute". But others were entranced.

Spark was born in 1918; to mark her centenary, Polygon, a Scottish imprint, is reissuing all 22 of her novels. Reading them is a corrective to the sentimental view of her that adaptations of her work sometimes encourage. As far-right ideas spread, and misinformation abounds, her books are a piercing reminder of how extreme politics can appeal to the sanest-seeming people—and that half-truths and malfeasance are as intrinsic to human nature as breathing. Spark is a bard of nastiness and lies.

She began writing novels late, at 39. Before then she accumulated experiences—a failed marriage to Sydney Spark in Rhodesia (now Zimbabwe), years in London boarding-houses—that she would mine in her fiction. Once she started, the books came quickly, one every other year or so. An article in the *New Yorker* argued that God was her main character, but there

were many others, and many other subjects: old age and dementia, the Book of Job, Mary Queen of Scots, Lord Lucan, Jerusalem. She wrote about Edinburgh schoolteachers, and about a woman searching for someone to murder her.

Her style was minimal and sharp. She had what her fellow novelist John Updike called a "sweet sting". The sting was administered in precise, unsparing prose. "How little one needs, in the art of writing, to convey the lot," she observed. Rather than go to university—why bother, when she could discuss John Donne as well as any other Edinburgh girl?—she took a course at Heriot-Watt College in precis-writing. That helped shape the economy of her sentences. Meanwhile, she found shorthand was useful when she wanted to eavesdrop, listening in on "chance remarks overheard on a train, in a restaurant".

Her fiction crackled with conversations. The narrator of "Loitering with Intent" takes a day off work:

I stayed in bed the next morning; about eleven o'clock, when I woke, I telephoned to Hallam Street to say I wasn't coming in.

Beryl Tims answered the phone.

"Have you got a medical certificate?" she said.

"Go to hell."

"Pardon?"

"I'm not ill," I said. "I was out dancing all night, that's all."

"The Prime of Miss Jean Brodie", her sixth book, made Spark's name in 1961. A film starring Maggie Smith followed in 1969 (see picture), as did a Broadway show. In ►►



The crème de la crème

► Spark's words, the novel became her "milch cow". Set in Edinburgh in the 1930s, it features an inspiring, infuriating teacher, Jean Brodie, who teaches her girls ("the crème de la crème") to admire Renaissance paintings and Mussolini. Aspects of the character were based on Spark's own schoolteacher, Christina Kay, who in her classroom also displayed a picture of Il Duce's Fascisti marching in Rome, along with reproductions of paintings by da Vinci and Giotto. Like Miss Brodie, Miss Kay took her favourite pupils to afternoon tea and the ballet. Unlike Miss Kay, Miss Brodie has affairs with the music and art teach-

ers, and encourages a wayward schoolgirl to go to Spain to fight for Franco.

The Donmar Theatre in London has staged a new adaptation of the novel this month. As has become customary, it offers a somewhat sanitised version of the story. As played by Lia Williams, Miss Brodie is less the tyrant of the book than a tragic figure. Her abortive love affairs are as prominent as her ultimate betrayal by one of her own pupils. She admires Mussolini, but her respect for "reliable" Hitler has gone. "Women, particularly single women, adore a strong man," Spark told an interviewer in 1979. "There were many in those

days who admired Hitler."

To downplay this aspect of the novel is to miss its seriousness. Such simplifications help create an image of Spark as a twinkly eccentric—as Alan Taylor, a Scottish journalist, sometimes does in "Appointment in Arezzo", his recently published memoir of their friendship. She was rather a woman who could be harsh (she fell out bitterly and publicly with her son), and a novelist who grappled with the clash of good and evil. In "The Prime of Miss Jean Brodie" and elsewhere, hateful views come to seem normal. On her centenary, her work is a warning. ■

Johnson | Fossil hunting

Language can be seen as a record of the past

WHEN stone tools were recently found in China, they were interpreted as proof that the exodus of humans from Africa took place hundreds of thousands of years earlier than was previously thought. The discovery of some hunks of chipped rock illuminated events almost 2m years ago—an intellectual coup for the palaeoanthropologists and geologists who were involved.

Not all fossils are made of stone. For example, at *The Economist's* headquarters in London there is a sign reading "By the lifts"; under it are pinned assorted memos and news reports. There are no lifts nearby. Only those of us familiar with the newspaper's history understand the allusion: such clippings were displayed near the lifts in our previous HQ. Similarly, departments of the paper continue to call themselves "12th floor" and "13th floor", even though they now share the same (sixth) floor in the new building.

Language is full of relics like this, many of them with fascinating stories to tell. That "13th floor" is what is sometimes called an "anachronism": a name that no longer makes sense, because the underlying facts have changed while the language has not. Anachronisms abound. People still "dial" phone numbers, though phones no longer have a dial. They are told to "tune in" to a television show, though TVs no longer have tuners. E-mail's "CC:" feature stands for "carbon copy", though the smeary blue paper that once made instant copies possible is hardly to be found on Gmail.

Clichés and ossified phrases are another way to get a glimpse into a lost past. Take "stuck in a rut". Most people have an idea that a rut is a kind of physical groove, but what kind? The Oxford English Dictionary helpfully explains that the origin is the groove cut by sharp cartwheels in a



soft road. Today, in a world full of soft wheels and hard roads, only metaphorical ruts remain, a reminder of an earlier time. It is a kind of phrasal anachronism.

An anachronism is different from a "retronym". These are words that have had to change because the world has changed around them. A guitar was once a stringed instrument whose hollow wooden body produced its sound. Then someone added magnets and electricity, and the popularity of the electric guitar necessitated a new word for the old thing: the "acoustic" guitar. If you are reading these words on paper, you might consider yourself a fan of "print newspapers", a term that would once have been a tautology but has become, in the era of digital publishing, a necessary retronym.

Much of the gunk and irregularity of language begins to make sense when approached as a kind of fossil hunt. Why does the commonest verb in English—"to

be"—have the wildly irregular conjugation *am-is-are-was-were*? Nobody would design such a verb, and indeed no one did. It is in fact a mash-up of three proto-Germanic roots, one of which produced *am-is-are*, one of which yielded *was-were* (replacing the past tense of the *am-is* group, in a process called suppletion), and one resulting in *be* itself. It is the duck-billed platypus of verbs, an odd hybrid of features. But just as evolutionary biology explains the platypus, historical linguistics shows how the three verbs piled up on each other.

Historical wear and tear often deforms phrases so they seem to be nonsensical. Take the expression—widely used in the discussion of Brexit—"to have your cake and eat it". This is no contradiction at all; one can have and subsequently consume a cake. The point is clearer in the original form: "to eat your cake and have it." In this order, the combination is not possible, and so the cliché makes more sense.

Etymology and the history of language are intriguing in their own right. Who could not love the fact that a "daisy" gets its name from being the "day's eye", because the flower opens in sunlight? But assorted unconnected facts are just that—fleeting cocktail-party diversions. However, when the processes of change fall into regular categories and patterns—retronyms or suppletive verbs like *to be*—they illuminate something bigger. Beneath the illogic of irregular verbs and baffling proverbs is, if not order, at least reason. As a bonus, there are lessons aplenty about the history of human culture more generally.

Kant said that "out of the crooked timber of humanity, no straight thing was ever made." But crooked things can be as lovely as regular ones—and they are often much more interesting.

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Economic data

% change on year ago

	Gross domestic product			Industrial production latest	Consumer prices		Unemployment rate, %	Current-account balance		Budget balance % of GDP 2018†	Interest rates, % 10-year gov't bonds, latest	Currency units, per \$	
	latest	qtr* 2018†	2018†		latest	2018†		latest 12 months, \$bn	% of GDP 2018†			Jul 18th	year ago
United States	+2.8 Q1	+2.0	+2.8	+3.8 Jun	+2.9 Jun	+2.5	4.0 Jun	-465.5 Q1	-2.7	-4.6	2.87	-	-
China	+6.7 Q2	+7.4	+6.6	+6.0 Jun	+1.9 Jun	+2.2	3.9 Q1§	+115.1 Q1	+0.7	-3.5	3.29§§	6.71	6.76
Japan	+1.1 Q1	-0.6	+1.1	+4.2 May	+0.6 May	+1.0	2.2 May	+199.5 May	+3.8	-3.8	0.01	113	112
Britain	+1.2 Q1	+0.9	+1.3	+0.8 May	+2.4 Jun	+2.4	4.2 Apr††	-106.3 Q1	-3.6	-1.8	1.40	0.77	0.77
Canada	+2.3 Q1	+1.3	+2.3	+5.2 Apr	+2.2 May	+2.2	6.0 Jun	-53.8 Q1	-2.7	-2.2	2.15	1.32	1.26
Euro area	+2.5 Q1	+1.5	+2.2	+2.4 May	+2.0 Jun	+1.6	8.4 May	+484.4 Apr	+3.3	-0.7	0.34	0.86	0.86
Austria	+3.4 Q1	+9.7	+2.9	+5.9 Apr	+2.0 Jun	+2.1	4.6 May	+9.5 Q1	+2.3	-0.6	0.41	0.86	0.86
Belgium	+1.5 Q1	+1.3	+1.7	+2.9 Apr	+2.1 Jun	+1.9	6.0 May	+0.2 Mar	-0.4	-1.1	0.63	0.86	0.86
France	+2.2 Q1	+0.6	+1.9	-0.9 May	+2.0 Jun	+1.9	9.2 May	-9.9 May	-0.8	-2.4	0.60	0.86	0.86
Germany	+2.3 Q1	+1.2	+2.1	+3.1 May	+2.1 Jun	+1.8	3.4 May‡	+317.4 May	+7.7	+1.1	0.34	0.86	0.86
Greece	+2.3 Q1	+3.1	+1.8	+0.9 May	+1.0 Jun	+0.7	20.2 Apr	-2.9 Apr	-1.2	-0.3	3.86	0.86	0.86
Italy	+1.4 Q1	+1.1	+1.3	+2.1 May	+1.3 Jun	+1.2	10.7 May	+55.7 Apr	+2.5	-2.0	2.51	0.86	0.86
Netherlands	+2.8 Q1	+2.3	+2.6	+3.2 May	+1.7 Jun	+1.5	4.8 May	+91.2 Q1	+9.6	+0.8	0.45	0.86	0.86
Spain	+2.9 Q1	+2.8	+2.7	+1.6 May	+2.3 Jun	+1.7	15.8 May	+21.3 Apr	+1.5	-2.7	1.22	0.86	0.86
Czech Republic	+3.4 Q1	+2.2	+3.5	+1.4 May	+2.6 Jun	+1.9	2.3 May‡	+0.9 Q1	+0.5	+0.9	2.10	22.2	22.5
Denmark	-1.4 Q1	+1.8	+1.8	-1.7 May	+1.1 Jun	+1.1	4.0 May	+20.2 May	+6.3	-0.7	0.32	6.40	6.42
Norway	+0.3 Q1	+2.5	+1.9	-5.7 May	+2.6 Jun	+2.3	3.7 Apr††	+22.8 Q1	+7.4	+5.4	1.72	8.18	8.06
Poland	+5.2 Q1	+6.6	+4.4	+6.8 Jun	+2.0 Jun	+1.7	5.9 Jun§	-1.0 May	-0.6	-2.2	3.12	3.70	3.63
Russia	+1.3 Q1	na	+1.7	+2.1 Jun	+2.3 Jun	+2.9	4.7 Jun§	+64.6 Q2	+3.5	+0.3	8.13	63.0	59.1
Sweden	+3.3 Q1	+2.9	+2.7	+3.7 May	+2.1 Jun	+1.8	6.5 May§	+16.8 Q1	+3.3	+1.1	0.47	8.86	8.27
Switzerland	+2.2 Q1	+2.3	+2.2	+9.0 Q1	+1.1 Jun	+0.8	2.6 Jun	+72.9 Q1	+8.7	+0.8	nil	1.00	0.95
Turkey	+7.4 Q1	na	+4.2	+7.0 May	+15.4 Jun	+12.1	9.6 Apr§	-57.6 May	-5.9	-2.8	17.62	4.81	3.53
Australia	+3.1 Q1	+4.2	+2.9	+4.3 Q1	+1.9 Q1	+2.2	5.4 Jun	-36.8 Q1	-2.6	-1.0	2.66	1.36	1.26
Hong Kong	+4.7 Q1	+9.2	+3.4	+1.0 Q1	+2.1 May	+2.1	2.8 May††	+14.2 Q1	+3.3	+1.9	2.17	7.85	7.81
India	+7.7 Q1	+10.1	+7.3	+3.2 May	+5.0 Jun	+4.7	5.7 Jun	-48.7 Q1	-2.5	-3.6	7.75	68.6	64.3
Indonesia	+5.1 Q1	na	+5.3	+11.6 May	+3.1 Jun	+3.5	5.1 Q1§	-20.9 Q1	-2.3	-2.5	7.62	14,405	13,305
Malaysia	+5.4 Q1	na	+5.6	+3.0 May	+0.8 Jun	+1.5	3.3 May§	+12.2 Q1	+2.7	-3.3	4.11	4.06	4.29
Pakistan	+5.4 2018**	na	+5.4	+2.7 May	+5.2 Jun	+5.0	5.9 2015	-16.7 Q1	-5.8	-5.4	10.00†††	128	105
Philippines	+6.8 Q1	+6.1	+6.6	+19.8 May	+5.2 Jun	+5.1	5.5 Q2§	-1.9 Mar	-1.6	-2.7	6.45	53.5	50.8
Singapore	+3.8 Q2	+1.0	+3.2	+11.1 May	+0.4 May	+0.8	2.0 Q1	+61.7 Q1	+18.6	-0.7	2.43	1.37	1.37
South Korea	+2.8 Q1	+4.1	+2.9	+0.9 May	+1.5 Jun	+1.7	3.7 Jun§	+72.0 May	+4.8	+0.9	2.53	1,132	1,123
Taiwan	+3.0 Q1	+0.8	+2.7	+3.1 Mar	+1.3 Jun	+1.6	3.7 May	+84.8 Q1	+13.4	-0.9	0.88	30.6	30.4
Thailand	+4.8 Q1	+8.1	+4.1	+3.2 May	+1.4 Jun	+1.2	1.0 May§	+50.2 Q1	+9.7	-3.0	2.60	33.4	33.6
Argentina	+3.6 Q1	+4.7	+1.7	-0.8 May	+29.5 Jun	+27.1	9.1 Q1§	-33.8 Q1	-4.7	-5.3	8.24	27.7	17.1
Brazil	+1.2 Q1	+1.8	+1.7	-6.7 May	+4.4 Jun	+3.5	12.7 May§	-13.0 May	-1.0	-7.1	9.12	3.85	3.17
Chile	+4.2 Q1	+4.9	+3.7	+3.6 May	+2.5 Jun	+2.6	7.0 May§††	-3.1 Q1	-1.2	-2.0	4.55	657	657
Colombia	+2.8 Q1	+2.8	+2.5	+2.9 May	+3.2 Jun	+3.3	9.7 May§	-9.8 Q1	-3.1	-2.0	6.69	2,886	3,009
Mexico	+1.3 Q1	+4.6	+2.3	+0.3 May	+4.6 Jun	+4.4	3.2 May	-15.9 Q1	-1.8	-2.3	7.69	19.0	17.5
Peru	+3.2 Q1	+5.6	+3.7	+10.5 May	+1.4 Jun	+1.7	7.0 Mar§	-2.9 Q1	-1.6	-3.5	na	3.27	3.25
Egypt	+5.3 Q4	na	+5.4	+3.8 May	+14.4 Jun	+16.8	10.6 Q1§	-7.7 Q1	-2.5	-9.6	na	17.9	17.9
Israel	+4.1 Q1	+4.7	+3.7	+3.8 Apr	+1.3 Jun	+1.7	3.9 May	+9.7 Q1	+2.4	-2.4	1.94	3.64	3.57
Saudi Arabia	-0.9 2017	na	+1.0	na	+2.3 May	+4.4	6.1 Q1	+21.6 Q1	+7.5	-3.9	na	3.75	3.75
South Africa	+0.8 Q1	-2.2	+1.6	+1.4 May	+4.6 Jun	+4.7	26.7 Q1§	-12.2 Q1	-2.9	-3.5	8.69	13.3	12.9

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist poll or Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. †††3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

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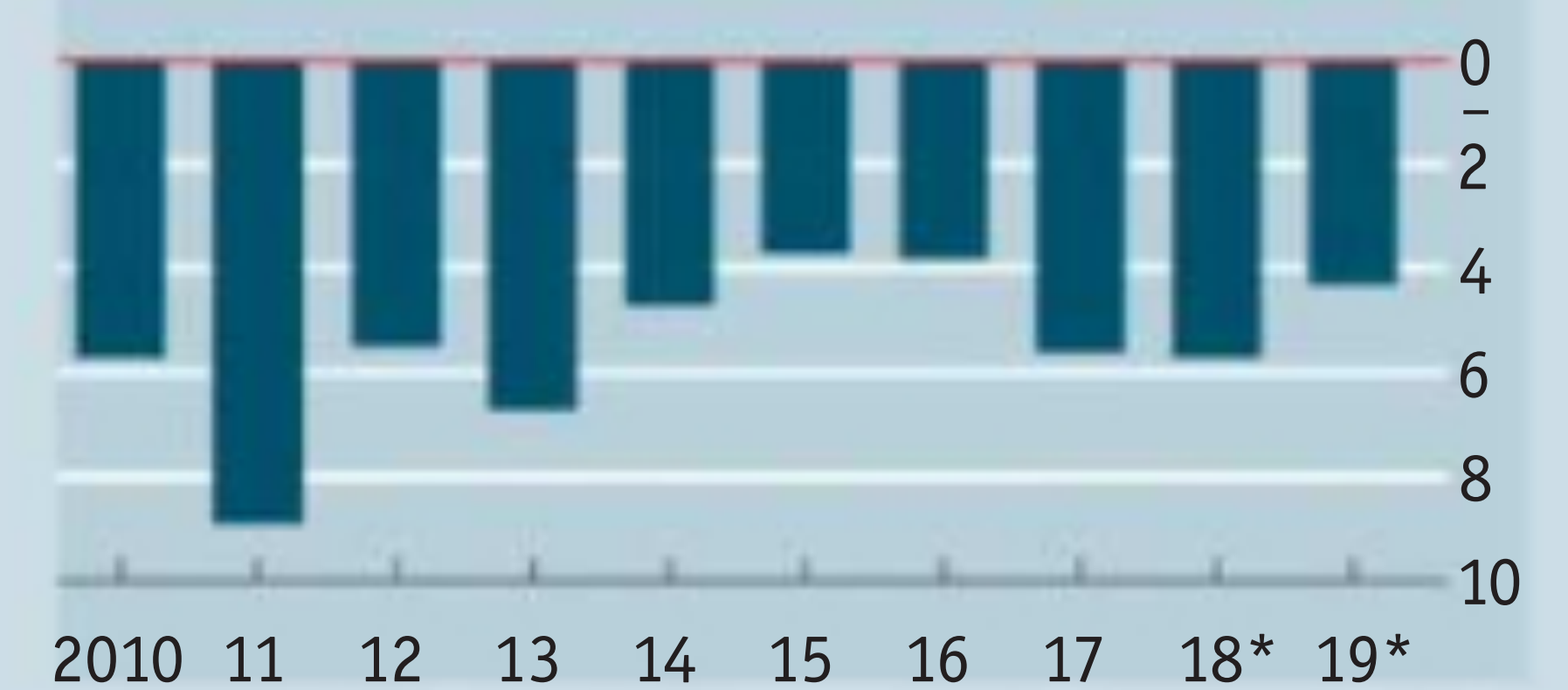
Markets

		% change on		
	Index Jul 18th	one week	Dec 29th 2017 in local in \$ currency terms	
United States (DJIA)	25,199.3	+2.0	+1.9	+1.9
China (Shanghai Comp)	2,787.3	+0.3	-15.7	-18.3
Japan (Nikkei 225)	22,794.2	+3.9	+0.1	nil
Britain (FTSE 100)	7,676.3	+1.1	-0.1	-3.7
Canada (S&P TSX)	16,477.4	+0.4	+1.7	-3.7
Euro area (FTSE Euro 100)	1,214.7	+2.0	+0.4	-2.6
Euro area (EURO STOXX 50)	3,485.1	+1.8	-0.5	-3.6
Austria (ATX)	3,311.9	+1.8	-3.2	-6.1
Belgium (Bel 20)	3,820.4	+1.1	-4.0	-6.9
France (CAC 40)	5,447.4	+1.7	+2.5	-0.6
Germany (DAX)*	12,765.9	+2.8	-1.2	-4.2
Greece (Athex Comp)	773.8	+3.6	-3.6	-6.5
Italy (FTSE/MIB)	21,972.2	+1.2	+0.5	-2.5
Netherlands (AEX)	568.2	+2.7	+4.3	+1.2
Spain (IBEX 35)	9,753.2	+0.2	-2.9	-5.8
Czech Republic (PX)	1,087.4	-0.1	+0.9	-3.4
Denmark (OMXC20)	922.2	+1.9	-0.5	-3.7
Hungary (BUX)	34,720.3	-1.0	-11.8	-18.2
Norway (OSEAX)	990.8	-2.7	+9.2	+9.3
Poland (WIG)	56,441.0	-0.2	-11.5	-16.9
Russia (RTS, \$ terms)	1,144.7	-3.5	-0.8	-0.8
Sweden (OMXS30)	1,570.4	+2.9	-0.4	-8.0
Switzerland (SMI)	8,938.1	+2.9	-4.7	-7.1
Turkey (BIST)	92,321.9	+1.1	-20.0	-36.9
Australia (All Ord.)	6,329.1	+0.5	+2.6	-2.7
Hong Kong (Hang Seng)	28,117.4	-0.7	-6.0	-6.4
India (BSE)	36,373.4	+0.3	+6.8	-0.7
Indonesia (JSX)	5,890.7	nil	-7.3	-12.7
Malaysia (KLSE)	1,753.1	+3.8	-2.4	-2.7
Pakistan (KSE)	40,897.9	+3.3	+1.1	-12.9
Singapore (STI)	3,240.5	-0.3	-4.8	-6.8
South Korea (KOSPI)	2,290.1	+0.4	-7.2	-12.3
Taiwan (TWI)	10,842.5	+1.6	+1.9	-0.8
Thailand (SET)	1,635.9	nil	-6.7	-8.9
Argentina (MERV)	27,044.5	-0.7	-10.0	-38.9
Brazil (BVSP)	77,362.6	+4.0	+1.3	-12.7
Chile (IGPA)	27,165.3	+1.3	-2.9	-9.1
Colombia (IGBC)	12,271.0	-0.3	+6.9	+10.6
Mexico (IPC)	49,002.8	nil	-0.7	+2.3
Peru (S&P/BVL)*	20,032.4	+1.6	+0.3	-0.8
Egypt (EGX 30)	15,578.7	-2.3	+3.7	+3.0
Israel (TA-125)	1,384.8	+0.6	+1.5	-3.2
Saudi Arabia (Tadawul)	8,452.3	+0.8	+17.0	+17.0
South Africa (JSE AS)	56,237.2	-1.7	-5.5	-11.8

Turkey's economy

The Turkish economy has boomed in recent years but the outlook for the future is uncertain, according to the OECD, a rich-country think-tank. Turkey was among the world's fastest-growing economies in 2017. This was largely due to a surge in government stimulus after an attempted coup in 2016. The current-account deficit is substantial, making the economy vulnerable to external shocks. A credit boom, along with the plummeting lira and rising oil prices, have helped push inflation into double digits, despite interest-rate rises this year. Add in a likely reduction in stimulus, and it is no surprise that the OECD expects growth to slow this year and next.

Current-account deficit, as % of GDP



% increase on a year earlier



Source: OECD

*Forecast

Other markets

		% change on		
	Index Jul 18th	one week	Dec 29th 2017 in local in \$ currency terms	
United States (S&P 500)	2,815.6	+1.5	+5.3	+5.3
United States (NASComp)	7,854.4	+1.8	+13.8	+13.8
China (Shenzhen Comp)	1,588.1	+2.2	-16.4	-18.9
Japan (Topix)	1,751.2	+2.9	-3.7	-3.8
Europe (FTSEurofirst 300)	1,516.0	+1.6	-0.9	-3.9
World, dev'd (MSCI)	2,142.2	+1.2	+1.8	+1.8
Emerging markets (MSCI)	1,068.8	+0.4	-7.7	-7.7
World, all (MSCI)	516.5	+1.1	+0.7	+0.7
World bonds (Citigroup)	938.2	-0.5	-1.3	-1.3
EMBI+ (JPMorgan)	799.8	+0.6	-4.3	-4.3
Hedge funds (HFRX)	1,271.3 [§]	nil	-0.3	-0.3
Volatility, US (VIX)	12.1	+13.6	+11.0 (levels)	
CDs, Eur (iTRAXX) [†]	64.1	-5.9	+42.0	+37.7
CDs, N Am (CDX) [†]	60.7	-2.6	+23.6	+23.6
Carbon trading (EU ETS) €	16.4	+2.0	+102.0	+95.8

Sources: IHS Markit; Thomson Reuters. *Total return index.

[†]Credit-default-swap spreads, basis points. [§]Jul 17th.

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The Economist commodity-price index

2005=100

	Jul 10th	Jul 17th*	% change on one month	% change on one year
Dollar Index				
All Items	144.9	142.2	-4.7	-1.5
Food	145.8	143.9	-2.7	-8.1
Industrials				
All	143.9	140.5	-6.7	+6.7
Nfa [†]	141.4	139.9	-1.3	+6.4
Metals	145.0	140.8	-8.8	+6.8
Sterling Index				
All items	198.6	196.6	-4.6	-2.5
Euro Index				
All items	153.7	151.4	-5.6	-2.3
Gold				
\$ per oz	1,254.5	1,227.7	-3.6	-1.1
West Texas Intermediate				
\$ per barrel	74.1	68.1	+4.6	+46.7

Sources: Bloomberg; CME Group; Cotlook; Darmann & Curl; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. *Provisional

[†]Non-food agricultural.

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A question of honour

Peter, 6th Lord Carrington, foreign secretary and servant of six prime ministers, died on July 9th, aged 99

Clearly he had to go. Although leaving the foreign secretary's grand office, the summit of his political ambitions, was the saddest day of his life, there was no alternative. Argentina's surprise invasion of the Falkland Islands in April 1982 had humiliated Britain. The disgrace had to be purged, and the person to purge it was the minister in charge. That was him.

The intelligence had been wrong. But Lord Carrington did not feel he had left undone anything he ought to have done. He believed in trying to see the view of the other side, courteously nudging them on if necessary, sharing a wink and a joke to get across any sticky patches. Talking, even banging on a bit, could find solutions. In the case of the Falklands, he thought a leaseback plan might work. Fortifying the islands struck him as injudicious. But all this had sent wrong signals to the Argentines. And so he surrendered his seals of office to the queen at Windsor, the last ministerial resignation on a matter of principle.

An additional sorrow was that he was not at Margaret Thatcher's side in the Commons to take his share of the flak. For his House was the Lords, and always had been. He was the first foreign secretary for 75 years never to have held elected office. (A seat on Buckinghamshire County Council did not quite count.) He would have rel-

ished the challenge of running, but as a hereditary peer that path was closed. His first government job, as an under-secretary in the Ministry of Agriculture in 1951, was announced to him by a man on a bicycle in the middle of a partridge shoot. He enjoyed the gentleman farmer's life, but was ready for politics, even in the less important second chamber.

And he had tried to resign from that post too, again for good reason: a kerfuffle over a piece of land in Dorset, Crichel Down, which the government had requisitioned and then transferred, ignoring the owners' rights. An inquiry found against the ministry, and he prepared to go. But Churchill, then prime minister, told him not to. In 1974, when the Tories lost the election, he considered leaving yet again.

Was he being over-dramatic? No; he did not go in for that. A very stiff upper lip was the rule. He was brought up under discipline, from the need to arrive on time at family dinner (his dinner jacket, stiff shirt and collar already laid out by the footman), to organising his work at Eton (where he was dim at everything, but not in the least unhappy), to endless drills in the Grenadier Guards. Through it all, he never belly-ached. A spy scandal at the Admiralty, when he was First Lord in the early 1960s, was "unpleasant". It was also "rather dis-

agreeable" to drive his tank in 1944 on to a bridge at Nijmegen, which was thought to be mined, in the face of German fire, even if it earned him the Military Cross—which he did not mention in his memoirs.

Diplomat in Wonderland

War was a leveller, and that greatly appealed to him. Though he spoke in a patrician drawl, one forefinger thoughtfully patrolling his chin, he was no snob. He loved brash, informal Australia, where he was high commissioner. His family's nobility was recent, after all, a reward from William Pitt at the end of the 18th century. He took up that dash of Toryism, but his deeper creed was his family's Whiggism and Liberalism: tolerance, reasonableness, pragmatism. Pragmatically he preached the virtues of embracing Europe, which he had seen rise out of ruins, and the political as well as the military concordat enshrined in NATO, which he headed in the 1980s. Reasonably, he thought that Britain should be run by the best-trained and most sensible people. Democracy, in the unbridled sense, worried him a bit.

Once in politics himself, he kept the bear-pit at arm's length. Over his 30 years' service he ran some difficult departments: Defence after 1970, at a time of sharp cuts in spending, and Energy from 1974, during the three-day week and the miners' strike. He stayed cool to any sort of ideology. That was sometimes not to Margaret's liking; it took nifty footwork to convince her that the Foreign and Commonwealth Office was, in fact, "sticking up for Britain". But his "wetness" made him the perfect diplomat.

Generally, he got on well with people. Every prime minister he worked for, he liked, especially Macmillan, of whom he could do a pretty good imitation. (Later, he named his dogs after them; but he adored his dogs.) Most foreign leaders fell for his charm, if only for a time. He kept intact his sense of the ridiculousness of the world; his favourite book was "Alice in Wonderland". That humour fortified him even during the most arduous talks of all, those that produced the Lancaster House agreement of 1979, which paved the way for black rule in an independent Zimbabwe. They took 14 weeks. He was accused of selling out white Rhodesians, but found their attitude untenable. Robert Mugabe seemed intelligent and amenable, and there was no alternative. He had few *post facto* regrets.

Did he have more over the Falklands, sacrificing a job he was so good at? No. He regretted only the many lives lost in that war. When journalists sought him out in retirement, at his Georgian house in Bledlow in Buckinghamshire (with its lovingly restored garden and agreeable proportions), they would inevitably raise the subject of his shouldering of blame. "It's so boring," he would sigh. But so rare. ■

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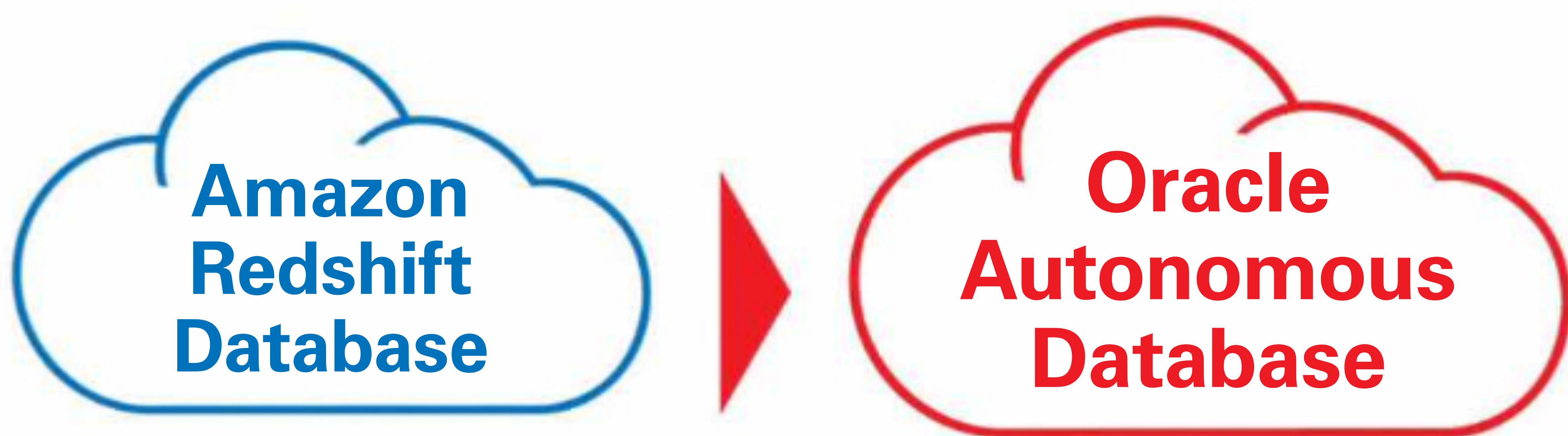
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